

JFQ

Issue 71, 4th Quarter 2013



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Inverting Clausewitz

2013 Essay Competition Winners

JOINT FORCE QUARTERLY

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Front cover: High-altitude, long-endurance unmanned aerial reconnaissance system RQ-4A Global Hawk provides joint force commanders near real time digital and infrared imagery anywhere on Earth in any weather condition, day or night (U.S. Air Force). Table of contents shows Kandahar Provincial Reconstruction Team leads reconstruction group through Shur Andam Industrial Park, Kandahar City, Afghanistan (U.S. Air Force/Richard Simonsen); Seabees drill for fresh water at Forward Operating Base Mescall, Shah Joy District, Zabul Province, Afghanistan (U.S. Navy); Marine relays information during antinarcotic operation in Marjah, Afghanistan (U.S. Marine Corps/David A. Perez); and Air Force joint terminal attack controller and fellow Servicemembers conduct patrol in Laghman Province, Afghanistan (U.S. Army/Leslie Goble).

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Chairman speaks during ceremony marking return of U.S. Forces—Iraq colors



U.S. Air Force (Perry Aston)

From the Chairman

Leadership in Historic Times

It is a great privilege to serve as your Chairman for another term. Together we will continue to protect our nation and honor our profession.

Over the past 2 years, we have served together on the leading edge of historic changes. We are transitioning from two conflicts and rekindling the skills necessary to provide options against a broad range of threats. We are transitioning tens of thousands of our veterans and their families back into their civilian communities. We are dealing with the reality of deep and rapid budgetary transitions as well. We're going

to see what we're made of in the months and years ahead.

When *Joint Force Quarterly* published its first issue in the summer of 1993, it featured a military leader who was in the midst of dealing with the transitions of his era. General Colin Powell wrote of his time as Chairman, "Walls have come down, empires have crumbled, new nations have been born."

We recall those days when the Cold War ended. The Joint Force had performed brilliantly in Operation *Desert Storm*, but those of us who served in that conflict

realized that Service coordination and interoperability still needed to improve. As just one example, it was in *Desert Storm* that I first operated in a joint environment, and I had been in the Army for 15 years. Today, we know a lot more about each other, and we operate together far more effectively. Truly, the walls have come down. We are more joint today, but not yet joint enough.

We will continue to explore the opportunities for increased jointness because we should and because we will have to if we are to provide the range of options necessary to protect the Nation in uncertain security and fiscal environments.

It is also worth noting that the Vice Chairman of the Joint Chiefs of Staff in 1993, Admiral David Jeremiah, described the post-Cold War world as “teeming with nascent crises.” I have described today’s world as more dangerous than at any time in my career because of the increasing number of actors—state and nonstate—that can do us harm. In any case, no matter how we describe the security environment, it will be the enduring quality and dedication of our Servicemembers that will allow us to prevail.

Soldiers, Sailors, Marines, Airmen, and Coastguardsmen are serving together today all over the world. General Powell’s maxim that “we train as a team, fight as a team, and win as a team” is even truer today. As we confront competing security priorities and declining resources, we cannot short-change our commitment to jointness either in training or in operations.

Leadership got the Joint Force through its post-Cold War challenges 20 years ago, and it will get us through today’s challenges as well. I have witnessed firsthand the courage, dedication, and determination of our nation’s military leaders at every level—leaders who, even as I write this message, are lacing up their boots and departing the security of forward operating bases in Afghanistan, strapping themselves into jets to fly combat air patrols wherever and whenever needed, steaming through waters within range of increasingly capable adversaries, diving to unimaginable depths of the ocean, or simply serving in places where few would willingly go.

One hundred and fifty years ago, on the first day of the Battle of Gettysburg, General John Buford was asked if he could hold Seminary Ridge against a numerically superior Confederate force until the main



Buying Time by Dale Gailon

General John Buford and dismounted troopers holding A.P. Hill’s Corps on the morning of July 1, 1863



DOD (Helene Stikkel)

General Colin L. Powell, then Chairman of the Joint Chiefs of Staff, interviewed after cease-fire in Operation *Desert Storm*

body of the Union Army could establish itself in defensive positions behind him. He replied simply, “I reckon I can.” He did, of course, and those serving with him may arguably have saved the Union on that fateful day through their courage, valor, and perseverance.

In that spirit, those of us privileged to lead today must act with similar courage, valor, and perseverance. We will be tested.

I have been asked often whether I think we can manage all of the challenges we will continue to face. I reckon we can. I am proud to continue to serve with you. **JFQ**

MARTIN E. DEMPSEY
General, U.S. Army
Chairman of the Joint Chiefs of Staff



Senior Enlisted Advisor to Chairman
speaks at Ramstein Air Base

Widening the Aperture in Education

By BRYAN B. BATTAGLIA

Our education efforts provide a force multiplier in our effort to develop and advance the shared values, standards, and attributes that define our Profession of Arms. However, much is changing in the security environment as well as the experiences of our leaders that will challenge us to deliver high quality Joint education as never before.

—General Martin E. Dempsey
Joint Education White Paper

Sergeant Major Bryan B. Battaglia, USMC, is the Senior Enlisted Advisor to the Chairman of the Joint Chiefs of Staff and the Senior Noncommissioned Officer in the U.S. Armed Forces.

As noted in the Chairman's Joint Education White Paper (dated July 16, 2012), we belong not only to a Profession of Arms, but also to a learning institution. Continued education allows us to become more proficient, more valued, and more relevant in our roles and responsibilities as senior noncommissioned officers (NCOs) and petty officers (POs).

Our four Service branches confidently maintain their traditional Title 10 obligation (man, train, and equip), and the enlisted professional military education system is well established throughout the enlisted Service academies. Enlisted professional military education serves as a dynamic foundation for continued growth and follow-on assignments. Outside of the confines of intra-Service billets are enlisted

joint assignments that necessitate additional education not normally embedded in an enlisted academy curriculum. Enlisted joint professional military education (JPME) has a similar design as it prepares Servicemembers for those joint or multinational roles.

As further defined in the Chairman's white paper:

The last decade has . . . demonstrated that our enlisted force requires education and not "just training." Recognizing that officers and enlisted personnel have different functions, responsibilities, authorities and levels of organizational accountability, Joint Force 2020 must develop the talents and abilities of leaders at every echelon to maximize their individual potential, build effective units, and to optimize their contribution to the joint fight. We must assist every service member in becoming a life-long learner, always hungry for new knowledge and deeper understanding.

There are many National Defense University (NDU)–sponsored programs available to our enlisted force that will offer continued growth in your professional military career.

Senior Enlisted Joint Professional Military Education. Select NCOs/POs (E6 and above) are eligible. It is a stand-alone Web-based course that uses multimedia instruction. It contains a pretest, module knowledge checks, and final examination. Students can access this program through their respective Knowledge Online sites (for example, Army Knowledge Online, Joint Knowledge Online, Air Force Portal, Marine Online, and so forth).

Masters of Arts in Strategic Security Studies. Select enlisted personnel from special operations forces are eligible for nomination into this program located at Fort Bragg, North Carolina. The program analyzes the 21st-century geopolitical environment characterized by the rise of non-state actors and the uneven erosion of state sovereignty; evaluates the roles of power and ideology, rise of new politicized ideological movements, and bases for authority and legitimacy; studies the relationship among political objectives, strategy, and all instruments of national power; and develops skills to think critically and strategically, differentiate between policy and analysis, and apply knowledge in collaborative and complex circumstances with diverse partners.

Joint and Combined Warfighting School JPME-II. Select NCOs/POs (E7 and above) are eligible for nomination/selection to this program located at the Joint Forces Staff College (JFSC) in Norfolk, Virginia. Graduates will be able to lead joint planning efforts, integrate the creativity of operational art with the analytical and logical process of operational design, and be proficient with the Joint Operation Planning Process as the application framework to develop theater strategies and operational plans in a complex global operating environment.

Advanced JPME (AJPME). Select NCOs/POs (E7 and above) are eligible for nomination/selection. AJPME is a Reserve component program similar in content but not identical to the in-residence JFSC Phase II course. Students are JPME Phase I graduates. AJPME educates Reserve officers, builds upon the foundation established in JPME Phase I, and prepares Reserve officers (O4 to O6) for joint duty assignments. AJPME is the Chairman of the Joint Chiefs of Staff–directed JPME Phase II-equivalent education for Reserve officers.

Reserve Components National Security Course. Select NCOs/POs (E7 and above) are eligible for nomination. It is a 2-week course facilitated by NDU two to three times per year. Currently, there is only one NCO/PO in each seminar (approximately 18 students per session).

Joint, Interagency, and Multinational Planner's Course. Select NCOs/POs (E7 and above) are eligible for nomination. It is a 40-hour course for government personnel along with international partners at O4 to O6 levels (or civilian equivalent) to engage in a 30-person seminar to enhance planning skills necessary to be more fully enabled planners for a unified commander in answering the challenges of complex contingencies and effective campaign planning.

Joint Command, Control, Communications, Computers, and Intelligence (C4I) Staff and Operations Course. Select NCOs/POs (E7 and above) are eligible for nomination. The course provides students with a broad understanding of approved joint C4I doctrine and current policy guidance, helps students apply joint C4I concepts and organizations to the operational level of war (focused on the joint task force action officer), and helps students apply skills and procedures for duty in joint or Service C4I staff operations and planning assignments.

Joint Information Operations Orientation Course. Select NCOs/POs (E7 and above) may be considered for nomination case by case. This 1-week course gives students a common baseline of information operations knowledge upon which to build practical skills and abilities to employ tools and techniques. Students are exposed to four blocks of instruction: strategy; intelligence support; information-related capabilities; and organization, training, and equipping. Each block includes a combination of instructor lecture, guest speaker presentations, guided discussions, and/or panel discussions.

Joint Information Operations Planners Course. Select NCOs/POs (E7 and above) may be considered for nomination case by case. The course educates and trains students to plan, integrate, and synchronize full-spectrum information operations into joint operational-level plans and orders. The course accomplishes this through class presentations, guest lectures, case studies, and practical exercises in a joint seminar environment.

Homeland Security Planner's Course. Select NCOs/POs (E7 and above) are eligible for nomination. The course consists of 40 hours of instruction conducted through informal lectures, guided discussion, guest speakers, and case studies. It concludes with an 8-hour computer-assisted simulation exercise in homeland security consequence management.

KEYSTONE. This senior (E9) executive-level course prepares command senior enlisted leaders (CSELs) for service in a joint headquarters. The course enables students to think intuitively *joint*, while serving as CSELs in general/flag officer joint organizations. Areas of study and outcomes are national military capabilities and organization, joint doctrine, joint force leadership, and Service, joint, interagency, and multinational capabilities.

Do any of these courses sound interesting to you? If so, visit www.jfsc.ndu.edu/ or inquire at your command education and training office. **JFQ**

Executive Summary

Recently I taught a lesson here at National Defense University on war termination. The required readings included a chapter from Fred Iklé's seminal work, *Every War Must End* (Columbia University Press, 1971). Dr. Iklé initially published this book as the United States was looking for an exit from the Vietnam War. This classroom reading was a part of what turned out to be a timely and spirited discussion as the drawdown of forces in Afghanistan continues and events unfold around the likely U.S. response to Syria's use of chemical weapons on its own citizens.

General Colin Powell credits *Every War Must End* with giving him an understanding of how to end the first Gulf War. In his revision of the work published in 2005, Dr. Iklé criticized Washington's handling of the Iraq War. He identifies the hard questions that all parties involved in a conflict wrestle with, including determining what the goal is, how it can be achieved, and when will it be obvious that end has arrived. Dr. Iklé offers many historical cases to show the complexity of war as viewed from many vantage points, including the parliaments and chateaus of World War I, the end of war with Japan, the geostrategic challenges in the 1950–1953 Korean War, the secret negotiations in Paris during the Vietnam War, and more.

As with every good book, the author must have a main purpose for writing it. I believe that Dr. Iklé works hard to provide the insight that both civilian and military strategists and planners rarely spend as much time working on how to end a war as they do on beginning one. His examples are plentiful enough to describe this condition as one that is historically true for more than just Americans.

But more than *identifying* the problem, Dr. Iklé places the burden of seeking to limit war on the world's "leading democracies . . . to create a new political order" with "the purpose of this endeavor to bring every war to an end without unleashing the cataclysmic destruction made possible by modern technology."¹ His concern was over the remaining size of the nuclear, biological, and chemical stockpiles that we still recognize as a global threat. After some 20 years, the democratic nations of the world are again wrestling with the primary strategy equation of ends, ways, and means—mixing in a good amount of technology along the way as we collectively seek order in this unsettled world. *Joint Force Quarterly* seeks to publish thoughtful articles that should help the reader find insight in how best to meet the continuing challenges the new world order brings.

In this edition's Forum, we present four valuable views that offer you the opportunity to consider new uses for existing capabilities in order to calculate the resource implications and review legal issues emerging from combat operations in Kosovo, Iraq, Afghanistan, and Libya. Given the current entropic global environment, these authors provide a diverse set of views on modern warfare, which we believe are essential reading. One of the evolving capabilities of the joint force resides with the U.S. and coalition partner airborne forces. Major General John Nicholson, Lieutenant Colonel Jason Condrey, and Major Claude Lambert explain how the forcible entry capability, resident within the joint force and growing in our partners, remains a requirement to assure forces can gain access to conflict areas when required. They also discuss the value added internationally when U.S. airborne forces provide essential training to our partners as a means

to more effectively deal with global crises as they arise.

Next, from the National War College, Ambassador Gregory Schulte takes us back to a time just before the current period of war by discussing the Kosovo air war's strategic lessons. Having been at the center of American air power employment at the start of the Libyan campaign, Major General Margaret Woodward and Lieutenant Colonel Philip Morrison next provide the logic behind that effort to protect civilian populations, while engaged in a similar effort a decade later. On the domestic political front, as the White House seeks congressional approval prior to any military action in Syria, James Terry's article on Libya and the War Powers Act should be placed at the top of any serious policymaker's must-read list. Collectively, these articles offer a significant set of considerations given the situation in relation to what the United States might do militarily to respond to Syrian attacks on its population. It is rare that *JFQ* is able to offer such important thinking at the moment such events unfold, but this is exactly what we hope to do when we are able.

This edition next presents the 2013 7th Annual Secretary of Defense and 32nd Annual Chairman of the Joint Chiefs of Staff Essay Competition winners in each of the three categories. This year's competition has yielded some outstanding writing on a much wider range of topics than usual. The judges from across the joint professional military education community all commended the students for their critical thinking skills and writing talent. In the winning Secretary of Defense essay, Colonel Jonathan Rice discusses the most important questions that must be answered when issuing cyber attack guidance. Lieutenant Colonel Joel Luker won



President meets with National Security Staff in Situation Room to discuss Syria

in the Chairman's strategic essay category with a timely review of how culture within the Defense Department is key to solving its current budget issues. In the Chairman's strategic article category, in which the author has to successfully develop and defend a theme in 1,500 words or less, Gina Bennett explores the difficulty of seeking to defeat al Qaeda. In addition to these winners, *JFQ* will feature additional high quality essays from this year's contest in future editions.

As editor, I am fortunate to have the opportunity to blend the writing of both new authors and journal alumni. This edition's Commentary section has a wealth of great thoughts from both on the constantly evolving world of intelligence, surveillance, and reconnaissance (ISR) capabilities, the value of strategy, and how best to organize the joint force for effective employment as we go forward. On the ISR front, General Robert Cone calls for a restructuring of how the U.S. Army is organized at the operational level to take advantage of the experiences of the last decade war and to ensure the joint force and the Army are best positioned to exploit the advantages that reconnaissance and surveillance provide beyond the tactical fight. He suggests that even as the Army shrinks, this deeper and higher level integration is critical to determining enemy intent over time. Andrew Robert Marvin develops new approaches to how ISR could be effectively tailored to address the operational problems inherent in joint force employment to locations where adversaries are prepared to present commanders and units with antiaccess/area-denial issues.

Dr. Colin Gray follows up his popular article published in *JFQ* 67 on strategists as heroes with his views on strategy focusing on five perspectives that include concepts, ethics, culture, geography, and technology. As always with Professor Gray's writing, there is something for everyone interested in the subject to contemplate. If seeking to understand strategy remains high on your list of necessary tasks, then Professor Daniel McCauley offers a set of important ideas on how to deal with the complexities of the globalized world in which the joint force must operate.

In the Features section, we have three discussions focused on how we can continue to develop the joint force as we assist host nations in building for a better future and two perspectives in the on-going debate on missile defense in Europe. Drawing on the Iraq experience, Dr. Keith Boyer and Lieutenant General Robert Allardice, USAF (Ret.), provide a good primer on how to assist a host nation in building better governance beginning with improving its ministerial capacity. Next, Lieutenant General Robert Caslen, Colonel Dean Raab, and Lieutenant Colonel Geoffrey Adams present a set of useful recommendations for improving joint security cooperation doctrine, as well as the requisite authorities needed to execute this critical mission. Security cooperation and host nation capacity-building have not been without their own sets of risks. The recurring problem of host forces attacking coalition forces, especially in a training setting (so called "green-on-blue" attacks), is the subject of Eric Jardine's article, which looks into why

these horrific events happen in Afghanistan. If there is armed resistance to placing our joint force where it can assist the host nation to develop along peaceful lines or if an outright effort to oppose the application of military force is at issue, the United States and its allies have options.

In this issue, we return to the ongoing discussion in *JFQ* of missile defense in Europe. Karen Kaya provides an in-depth report on North Atlantic Treaty Organization efforts in Turkey. After recent heated debates over missile defense both on political and technical grounds, Marvin Schaffer discusses what comes next in the Alliance after the planned European Phased Adaptive Approach completes.

The Recall section takes us back to the trenches of World War I, where Brad Clark examines the strategic leadership lessons we can take from the infamous Ludendorff Offensives of 1918. Two of our Joint Staff doctrine partners, James Parrington and Mike Findlay, offer us a detailed discussion on mission command, along with their joint doctrine publication update. As always, we bring you three important book reviews that we hope you will find useful.

As I have mentioned in an earlier edition of *JFQ*, change is a constant and nowhere more so recently than here at NDU Press. One of our longest serving staff members, George Maerz, retired this spring after more than 40 years of U.S. Government service, most of which was with National Defense University and NDU Press. George was the lead editor on thousands of pages of national and international security writing produced by students and scholars as well as from national and internationally renowned thinkers and doers. All of us who have benefited from his work owe George thanks for all of the quiet excellence he added to every page he touched.

We continue to look ahead for new and engaging writing on issues important to the joint force, and I encourage you to find the time to write and engage us in a conversation about the world you see ahead. **JFQ**

—William T. Eliason, Editor

NOTE

¹ Fred Charles Iklé, *Every War Must End*, rev. ed. (New York: Columbia University Press, 1981), xv.



Paratroopers from 82nd Airborne Division prepare to load C-130Js from 317th Airlift Group as part of Joint Access Operation Exercise, Pope Field, NC, June 2013

Assured Access Building a Joint and Multinational Airborne Forcible Entry Capability

By JOHN W. NICHOLSON, JR., JASON W. CONDREY, *and* CLAUDE A. LAMBERT

As we end today's wars and reshape our Armed Forces, we will ensure that our military is agile, flexible, and ready for the full range of contingencies. In particular we will continue to invest in the capabilities critical to future success, including intelligence, surveillance, and reconnaissance; counter terrorism; countering weapons of mass destruction; operating in anti-access environments; and prevailing in all domains, including cyber.

—President Barack Obama

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense

The Nation and its allies face a strategic turning point that necessitates the optimization of joint and multinational airborne joint forcible entry (JFE) capabilities to meet future security challenges. The security environment has been shaped more by surprise than inevitability, and the future presents “a complex and uncertain security landscape in which the pace of change continues to accelerate”¹—thus the ability for the United States and its multinational partners to respond quickly with assured access to introduce the capabilities required to secure its interests.

After more than a decade of ground combat with its tremendous investment of national blood and treasure, many policymakers are unable to envision a future

Major General John W. Nicholson, Jr., is Commanding General of 82nd Airborne Division, Fort Bragg, North Carolina. Lieutenant Colonel Jason W. Condrey is G5 Chief of Plans, 82nd Airborne Division. Major Claude A. Lambert is a Strategic Plans Officer, 82nd Airborne Division.

requiring the commitment of ground forces. However, the contrary is more likely, with scenarios that could arise from traditional state-based military threats, “disorder” from intrastate conflict and failing governments, transnational threats, violent extremist organizations, disasters, and hybrid combinations. Clearly, most of these circumstances, particularly those involving the loss of control of weapons of mass destruction or the protection of threatened American lives or interests, will require the rapid introduction of ground forces, employed in uncertain to nonpermissive conditions as part of a suite of interdependent joint force capabilities.

Fiscal constraints increasingly limit overseas basing options and access to volatile regions. As a result, our adversaries will employ asymmetric capabilities and antiaccess/area-denial (A2/AD) strategies in the global commons and possible operating areas to limit, delay, or degrade the employment of joint and coalition forces. Consequently, ground forces employed in crisis response scenarios must be agile, responsive, and capable of JFE, operational maneuver from strategic distance, fighting immediately on arrival to seize lodgments, and exploiting the initiative gained when our air and naval partners defeat the in-depth A2/AD efforts of our adversaries.

To ensure a robust and credible crisis response capability, the Department of Defense (DOD) directed the establishment of a joint Global Response Force (GRF), and the Army’s contributions are centered on the unique capabilities of the 82nd Airborne Division—rapidly deployable, forcible entry capable, tailorable in composition, scalable in size, adaptable to multiple missions, and always at a high state of readiness. Throughout its history, the 82nd Airborne Division has answered the Nation’s “911 call.”

With troop deployments to Afghanistan waning, the 82nd regains focus on its core mission of airborne JFE. It does so in full recognition that this is an inherently joint mission requiring the regeneration of core competencies to guarantee the capabilities necessary to conduct airborne JFE. Additionally, the last decade of war has certainly reinforced the importance of interoperability with our allies, who we cannot afford to meet for the first time in combat. As a result, we must continue to foster relationships and train with the airborne forces of our multinational partners, who are typically the rapid

response forces of their respective nations, in full recognition of the likelihood of operating side-by-side should our countries choose to act in concert against future threats. Thus, as one peers into the future, it is clear that the United States must maintain a diverse GRF that is rapidly deployable to the source of a crisis, highly trained and ready, able to assure access in any environment, and fully interoperable with potential partners and allies.

Prevailing in Defense

Since its inception, the employment or threat of employment of airborne units as the spearhead of an operation has repeatedly proved its strategic value by demonstrating compelling political resolve. This reinforces the old military adage that in order to deter an adversary, a nation must have the ability to defeat that adversary, and airborne forces are one of the most effective tools for doing so. Airborne JFE operations achieve tactical or operational surprise by making any spot in the world accessible and forcing an adversary to defend in all directions. During the last four decades, airborne JFE has proved itself as a credible option to demonstrate U.S. resolve by introducing significant combat power into both contested and uncontested operational environments. It remains the fastest way to introduce large numbers of ground forces—4,500 paratroopers in 30 minutes. As part of the GRF, the U.S. joint force has maintained the ability to deploy a brigade-size airborne force anywhere in the world within 96 hours of notification and, if needed, conduct forcible entry parachute assault to secure key objectives and execute follow-on combat operations ranging from deterring or defeating adversaries, protecting American and allied citizens and interests, securing key infrastructure, maintaining peace, or conducting stability operations or humanitarian assistance.

The 1983 intervention in Grenada during Operation *Urgent Fury* and the 1989 invasion of Panama in Operation *Just Cause* are notable airborne JFE operations that resulted in the restoration of legitimate governments.² When diplomatic efforts failed to achieve policy objectives, our joint force quickly achieved air superiority and rapidly projected land power for the decisive effect of removing hostile regimes. The success of these operations undoubtedly deterred future aggressors across the globe.

Airborne JFE is such a powerful instrument of national power that the threat of its employment can be as compelling as the reality. The multinational military intervention in Haiti clearly demonstrated this strategic deterrent value. In September 1994, President Bill Clinton approved Operation *Uphold Democracy* to forcibly remove the military regime installed by the 1991 coup d’état that overthrew Jean-Bertrand Aristide, the elected president. The plan centered on an airborne JFE operation—distributing nearly 4,000 paratroopers from 82nd Airborne Division over two drop zones to achieve 40 tactical objectives.³ With 82nd Airborne Division en route in an air armada of over 60 planes, former President Jimmy Carter and General Colin Powell had the strategic leverage to force the capitulation of an illegitimate regime and avert a U.S. invasion of Haiti.⁴ A close synchronization of diplomatic efforts with a ready, responsive, and imposing airborne JFE capability provided the U.S. administration with a powerful deterrence tool to decisively confront and defeat aggression without firing a single round.

Airborne JFE is most effective because its associated forces are always in a high state of readiness, operationally adaptable, and ready for immediate employment. However, they are not limited to parachute assaults and lethal operations. They are agile forces prepared to meet myriad potential crises thanks to a training regimen for the full spectrum of operations against hybrid enemy threats.

The following three operations clearly demonstrate the broad utility of 82nd Airborne Division and its rapid response capability. In 1988, when the Sandinista government of Nicaragua threatened the borders of Honduras, President Ronald Reagan launched Operation *Golden Pheasant* to counter Nicaraguan military incursions into the border areas of Honduras. Airborne JFE forces departed home on a short-notice deployment exercise consisting of an airborne assault and air-land operations followed by combined patrols along the Honduran-Nicaraguan border. The deployment was publicly described as a joint maneuver exercise, but the show of force, covered by international media, caused the Sandinistas to rapidly withdraw across their border, effectively deescalating the situation.

Six days after his invasion of Kuwait, Iraqi President Saddam Hussein massed

his armored forces on the Saudi Arabian border, threatening the Kingdom's sovereignty. President George H.W. Bush ordered air and ground forces to deploy to Saudi Arabia in response to a request from King Fahd. Within 48 hours of notification, lead elements of the Division Readiness Brigade (DRB) were on their way to Dhahran, Saudi Arabia, becoming the initial American presence on the ground and drawing "the line in the sand."⁵ The 82nd Airborne Division

understanding, fell in on mature infrastructures, and enjoyed unchallenged access to the theaters. Units generally knew when they would deploy and when they would return, and were able to transition with their predecessors for weeks. We refined our conduct of counterinsurgency in this manner for all of the right reasons: to give Servicemembers every advantage possible, but we should not delude ourselves that this will be the nature of future conflicts.

combining high standards of individual and unit readiness with a global force projection capability has provided policymakers with an undeniably critical instrument

bought the joint force time to deploy and set the conditions for follow-on coalition forces to expel the Iraqi army from Kuwait.

More recently, 82nd Airborne Division rapidly deployed to meet urgent humanitarian needs due to the effects of Hurricane Katrina in New Orleans and a catastrophic earthquake in Haiti. In both instances, 82nd deployed on short notice, adapted to unique circumstances on the ground, and significantly contributed to assuaging human suffering. Though neither deployment involved an airborne operation, a parachute assault was considered for Haiti because of unknown runway conditions at Port au Prince International Airport and a compelling need to get assistance on the ground rapidly.

Combining high standards of individual and unit readiness with a global force projection capability that can mass land power on any piece of ground in the world has provided policymakers with an undeniably critical instrument of national power. Since World War II, there have been 16 instances of airborne JFE forces achieving critical national objectives. In the future, our country's leaders will undoubtedly want and require this capability as a means to achieve U.S. interests.

Strategic Atmospheric

Our nation's longest war has understandably become somewhat predictable and formulaic in its conduct. International coalitions of up to 50 nations fought counterinsurgency in 2 countries against opponents who, although cunning and lethal, possessed a limited set of capabilities. Our forces enjoyed high levels of situational

The history of warfare tells us that future conflicts will occur unexpectedly and be characterized by uncertainty, friction, and dynamic political conditions. We must be prepared to conduct the full range of military operations against opponents who will possess some high-end niche capabilities (air defense, surface-to-surface missiles, chemical/biological weapons, and so forth), which may afford them some asymmetric advantage. In the initial stages, we will not possess all of the situational understanding that we desire and will have to fight for access to the theater against opponents' antiaccess capabilities. Our support infrastructures will be immature and expeditionary. Fortunately, we have the most combat-experienced leadership at all levels in our history, which is learning and leading units through this transition to be trained and ready for the nature of future conflicts.

Unlike the drawdown in the 1990s, the joint force today is decisively engaged in over 70 countries. Simultaneously, the Services confront equipment modernization requirements despite a decade of soaring budgets. More important, the United States faces a security environment that continues to become more uncertain, complex, and dangerous.⁶ As Washington responsibly draws down forces in Afghanistan, the joint force prepares for a different future—one involving "come as you are" conflicts with both powerful nation-state and elusive nonstate opponents that are capable, well organized, and lethally equipped.

A global view of the future operating environment makes clear that our adversaries have made considerable gains

in the weapons, technologies, and methods necessary to fulfill their A2/AD strategies. Our adversaries now have access to more lethal and disruptive technologies including precision-strike cyber warfare instruments and proliferation of weapons of mass destruction. As a result, both state and non-state actors have the capability to perpetrate violence and disruption on a grand scale.⁷ Our adversaries have also captured "lessons learned" from coalition operations during the Iraq and Afghanistan conflicts. Inexpensive investments in A2/AD will provide increased protection and standoff capabilities limiting freedom of action in the global commons and the terrain where we operate.

The joint force must maintain the ability to credibly dissuade, deter, and defeat adversaries as they present themselves. At the low end of the threat spectrum, we will encounter guerrilla-type opponents armed with limited A2 capabilities but vast experience with the employment of low-tech AD as they blend into the population.⁸ Like the Afghan Taliban, they will choose the time and place for contact with the joint force. In the middle of the spectrum we can expect to see Hizballah-like forces that employ hybrid tactics and techniques that combine irregular and guerrilla competencies with modern weapons.⁹ Though this type of threat is not new, their employment of A2/AD strategies, likely under no formalized or centralized command and control, would be less vulnerable to the comprehensive pressure of organized U.S. diplomatic efforts and military power.¹⁰ At the high end of the spectrum are the conventional forces of state actors, against whom we have historically built our grand strategy and force structure. We expect them to employ robust A2/AD capabilities.

As the United States looks globally and develops ways to counter our adversaries' A2/AD capabilities, it must consider resource constraints. Over the last decade, policymakers deliberately accepted risks associated with threat advances in A2/AD strategies and capabilities in order to mitigate operational and strategic risk associated with Iraq and Afghanistan.¹¹ As DOD reshapes its strategy to face future challenges, it is almost universally agreed that this method can no longer continue and that failure to adapt to the nature of future warfare may equate to unacceptable risk to U.S. interests abroad.

Cuts to force structure and the realignment of forces to a more continental U.S.-based posture will undoubtedly shape the perceptions of allies, future partners, and adversaries regarding our ability to meet current obligations and address emerging threats and crises. Historically, the presence of forward-stationed forces clearly demonstrated a commitment to protecting the global commons and a willingness to enter into conflict to achieve strategic stability and secure U.S. interests.¹² As the Army repositions forward forces stateside, the ability to maintain treaty obligations and conduct military engagement will rest on the shoulders of expeditionary forces. Observant adversaries will take notice of the decline in presence and implement strategies that threaten the ability of joint forces to traverse the global commons and project land power to gain and maintain access at a time and location of their choosing.¹³

Our allies have also been grappling with shrinking defense budgets, causing them to reexamine national priorities and the strategic policies that drive their force structure and capability decisions. Though each nation approaches the problem differently, the ability to provide responsive forces to deter and defeat threats as well as respond to unforeseen contingencies remains a common priority. The British are dividing their land forces into a Reaction Force and an Adaptable Force. Three Armored Infantry Brigades organized for expeditionary operations and a single Air Assault Brigade “trained and equipped to undertake the full spectrum of intervention tasks” comprise the Reaction Force available for short-notice contingencies.¹⁴ The French continue to embrace the concept of expeditionary forces as critical to maintaining national interests. According to their White Book, currently under revision, France will maintain “an intervention capability that is flexible and reactive, capable of conducting the entire spectrum of operations, often with the same men.”¹⁵ Their recent success with airborne JFE in Mali during Operation *Serval* reinforces their importance to crisis response capabilities and may indicate that little will change regarding how the French defense establishment will prioritize its resources. For many of our North Atlantic Treaty Organization partners, increasing budgetary pressures place them in a situation where they will optimize force structure and resource decisions so if they are

not able to fight alone, they are able to fight within a coalition and maintain maximum autonomy.¹⁶

The 2010 Quadrennial Defense Review, the 2011 National Military Strategy, and the President’s 2012 Defense Strategic Guidance, *Sustaining U.S. Global Leadership: Priorities for a 21st Century Defense*, each emphasize that the United States will face future access challenges to the global commons and critical regions of the world. Thus a critical core capability for the United States is the ability to “rapidly and globally project power in all domains.”¹⁷ The United States must overcome the illusion of unopposed strategic and operational access to locations deemed integral to securing core national interests. To prevail over the most complex national security challenges, our leadership must determine how it might breach sophisticated A2/AD capabilities, conduct opposed forcible entry, and maintain access and freedom of action in each contested domain despite persistent area-denial threats.¹⁸

Shaping an Airborne JFE

As previously discussed, all of our country’s strategic policy documents highlight our adversaries’ pursuit of A2/AD capabilities. In response, Chairman of the Joint Chiefs of Staff Michael Mullen described the following core military competencies neces-

sary to defeat aggression: “complementary, multi-domain power projection; joint forcible entry; and the ability to maintain joint assured access to the global commons and cyberspace should they become contested.”¹⁹ In recognition of emerging adversarial capabilities and changes in U.S. force posture, Admiral Mullen subsequently directed the development of the Joint Operational Access Concept, which is intended to guide how the joint force overcomes access challenges to achieve strategic goals. The concept defines general principles that describe how the joint force would approach opposed access and requisite capabilities for a cross-domain and in-depth execution.²⁰ These factors should largely determine the size, structure, and resources necessary to shape the core joint force capabilities and capacities required by

the GRF. In order to respond to global contingencies, the GRF—as a microcosm of what DOD offers as a whole—provides a menu of rapidly deployable forces to give national leaders and combatant commanders options for dealing with unforeseen challenges. As contributors to the GRF, the Services must organize, train, equip, and maintain their GRF contributions to ensure strategic flexibility, strategic depth, and strategic reach.

Strategic Flexibility. The GRF provides our leadership with strategic flexibility by delivering tailorable and scalable formations via multiple methods, which requires our adversaries to defend in all directions. In order to deliver these formations over great distances, the Army is dependent on the capabilities and future modernization plans of the Air Force and Navy. To achieve cross-domain effectiveness against A2/AD strategies arrayed in depth and time, each Service must collaborate on multidomain requirements using airborne, amphibious, and air assault JFE elements. This collaboration would drive the capabilities and resources necessary to achieve opposed entry, maintain freedom of action, and defeat adversaries who continue to employ AD strategies.²¹

Initial in-depth efforts to breach A2/AD threats would rely heavily on the Navy and Air Force. However, once enemy air defenses are neutralized and a lane is estab-

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lished, airborne forces allow the joint force to maintain the momentum by rapidly seizing key terrain and infrastructure to enable further penetration or follow-on operations. Once a foothold is seized and a lodgment established, follow-on forces would arrive; the joint force would then transition from reacting to A2/AD threats to dislocating and defeating the enemy at their origin. In recognition that a one-size-fits-all capability will likely fall short of unanticipated demands, the GRF must provide a mission-tailored force, in both size and capability, that is prepared to gain access and operate and sustain itself against the range of threats across a distributed battlefield under the harshest conditions.²² To meet those requirements, airborne JFE forces are ready to provide more than 4,500 paratroopers and mission-

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essential equipment, arrive anywhere in the world within 96-hours plus flight time and parachute into multiple drop zones in a matter of minutes. This immediately provides a full set of mission-tailored joint, DOD, and partner capabilities seizing the initiative from our adversaries and expanding a tactical airborne capability to achieve operational effects.

Strategic Depth. Inherently, joint and combined action forms the foundation for strategic depth. While the United States has always retained the right to act alone in pursuit of its national interests, the preference is to cooperate with allies, building political legitimacy with a multinational alliance, to achieve common objectives. U.S. interests are rarely isolated from other nations, and this creates opportunities to cooperatively deepen security ties, address common security challenges, and develop combined strategies to deter and defeat acts of aggression.²³ More than a decade of coalition operations has taught us how to approach problems as a partner, enhance interoperability in planning and command and control, and leverage nation-specific competencies to achieve collective goals that would otherwise be unattainable.

This is true with airborne JFE, where fiscal realities have driven likely partner nations to make choices that limit their rapid reaction forces' abilities to execute unilateral operations. These partners, however, still possess complementary capabilities and niche competencies that can advance combined efforts to achieve common goals. The French intervention to aid the Malian army against al Qaeda affiliates near Timbuktu, Mali, in January and February 2013, is an example. During Operation *Serval*, the French 11th parachute brigade and special operations forces conducted three opposed airborne operations to decisively defeat the threat where it was based.²⁴ Though uniquely enabled by the presence of French support structures in neighboring countries, the French military lacked the strategic airlift to gain and maintain access. Ten countries provided strategic airlift, refueling, and other specialized capabilities to cover the shortfalls. French air force officials remarked that "international partners, including the United States for the first time, were comfortable working under French operational command because of years of joint training and increased command and control (C2)

interoperability."²⁵ Operation *Serval* demonstrated how our partners embrace a new paradigm—where collaboration and the combination of limited capabilities create the ability to mass joint forces to decisively defeat aggression in remote areas of the world that would otherwise remain inaccessible.

We have entered an era when mission requirements no longer allow individual Services and, in some cases, individual nations to act alone. To this end, the 82nd cooperates with airborne forces from 15 nations in a multinational airborne community of purpose to ensure interoperability and rapid response capability development. An underlying outcome of airborne JFE is that it serves as the mechanism to facilitate the introduction and employment of other DOD and partner capabilities, purposefully conveying tactical action into operational effect. Hence, strategic depth requires pervasive interoperability within the joint force and between the United States and its allies. If this is not addressed, we may find our vital national interests under attack and just beyond our reach.

Strategic Reach. Providing a responsive airborne JFE capability that projects land power anywhere on the globe is possible only through inter-Service collaboration that defines mission requirements and requisite capabilities and then allocates sufficient resources and training. The joint force has become increasingly interdependent, but Service-centric budget planning, programming, and execution complicate the ability to develop and maintain critical multidomain capabilities. Currently, Services and partner nations struggle to balance mission demands, personnel management, and modernization requirements, while trying to reduce expenditures. Under such conditions, prioritizing resources against unanticipated future challenges becomes problematic.

To provide the joint force with flexible options, 82nd Airborne Division, the Army's largest contributor to the GRF, concentrates its focus on "winning the next war" by building competencies at every echelon in the following areas:

- GRF-directed mission training with a specific emphasis on deploying an airborne Infantry Battalion task force within 18 hours of notification to conduct airborne JFE and an airborne Brigade Combat Team within 96 hours of notification

- strategic deployment process and ensuring the ability to rapidly out-load personnel and equipment under short notice with joint partners

- mission command capability to conduct joint, interagency, intergovernmental, and multinational (JIIM) crisis-action planning prior to deployment, continue planning and situational awareness during the deployment and while en route, and employ small footprint command nodes that use reach-back to 82nd Airborne Division's main command post and joint operations center at Fort Bragg

- aligned training exercises and objectives with emerging combatant commander requirements and JIIM partners.

However, 82nd Airborne Division must balance these efforts with the requirement to continue to provide forces to Afghanistan and remain postured to reinforce units already forward. As the Army's most ready force, 82nd Airborne Division must prepare for the future while maintaining a commitment to winning the current war.

The Air Force is the most critical enabler of airborne JFE. Not only does it supply the strategic lift to deploy airborne forces and enablers, but, depending on proximity to the littorals, it may have the sole responsibility for defeating enemy A2/AD through offensive and defensive counter-air and suppression and destruction of enemy air defenses. A global response capability thus requires setting priorities and posture decisions that ensure effective global en-route infrastructure and the maintenance of strategic lift assets.²⁶ Current fiscal goals force senior leaders in the Services to make tough choices that meet real-world mission demands first and then mitigate the effects on fleet maintenance, modernization, and training to meet future challenges. In a January memo, the Secretary and the Chief of Staff of the Air Force explained the rationale behind prioritization and curtailment of flying hours and operational and international training exercises. An 18 percent reduction in flying hours has led to a flying stand-down from spring to fall of fiscal year (FY) 2013, driving nearly all flying units not deploying to "unacceptable readiness levels," sacrificing preparedness for contingencies. To mitigate risk to the current mission, cuts were disproportionately applied across the force.²⁷ For Air Force Mobility Command, those reductions equated to a 40 percent

drop in flying hours and, by the end of FY13, will result in dramatically lower readiness levels that will require extensive time and funding to recover from.²⁸

Under these conditions, Army and Air Force individual and crew competencies and the ability to collectively train to airborne JFE are secondary objectives. As one senior Air Force leader stated, "It is easier to go to war with the 82nd than it is to train with you." Army and Air Force leaders have embraced creativity and collaboration in order to optimize joint integration in every JFE training opportunity. For instance, the JFE Vulnerability exercise conducted by the Air Force Weapons School at Nellis Air Force Base, Nevada, combines Army and Air Force planners and GRF command posts from the division to the battalion levels to rehearse the joint planning and command and control required to defeat A2/AD strategies and create a lodgment. The Army's most recent Joint Operational Access exercise integrated the predeployment certification of the 317th Airlift Group with airborne JFE by the 82nd Headquarters and a reinforced airborne Brigade Combat Team to seize two airfields simultaneously, evacuate U.S. and allied citizens, and secure chemical weapons and critical infrastructure. Collaboration of this scale occurs only through willing teamwork and cooperation among joint commanders who have the mandate to train and maintain an airborne JFE capability for the Nation's future contingencies. Defeating known and anticipated A2/AD threats while gaining and maintaining opposed access requires national-level leaders to acknowledge the Service interdependencies necessary to achieve cross-domain dominance and coherently define requirements and allocate resources to enable airborne JFE.

Overcoming the Inertia of Circumstance

Historic examples of successful airborne JFE were due in no small part to the habitual relationships and practices developed during deliberate joint training. Strategic defense guidance established those relationships and prioritized resources to enable execution.²⁹ Today, Army and Air Force planners concede that the joint force could not reassemble the same package that restored Aristide two decades ago. Future crises will require the legitimacy of multinational coalitions that combine

trained and interoperable rapid response forces from many nations. This requires a commitment to resourcing an airborne JFE capability that produces a well-trained and capable team. Regardless of the language in the grand strategy of the United States, history demonstrates that success along the range of military options demands an airborne JFE capability. Failing to resource and train this capability creates excessive risk to the mission and troops and limits options the military can provide to the National Command Authority. **JFQ**

NOTES

¹ Department of Defense (DOD), *Quadrennial Defense Review Report* (Washington, DC: DOD, 2010), 5.

² Kyle E. Lear, "Airborne Joint Forcible Entry: Ensuring Options for U.S. Global Response," Strategy Research Project paper (Carlisle, PA: U.S. Army War College, January 2012), 6.

³ Anthony J. Tata, "A Fight for Lodgement: Future Joint Contingency Operations," *Joint Force Quarterly* (Spring 1996), 88.

⁴ The Carter Center, "President Carter Leads Delegation to Negotiate Peace with Haiti," September 5, 1994, available at <www.cartercenter.org/news/documents/doc218.html>.

⁵ Frederick W. Kagan and Christian Kubik, eds., *Leaders in War: West Point Remembers the 1991 Gulf War* (New York: Routledge, 2005), 46.

⁶ David W. Barno et al., *Hard Choices: Responsible Defense in an Age of Austerity* (Washington, DC: Center for a New American Security, 2011), 6.

⁷ National Intelligence Council (NIC), *Global Trends 2030: Alternative Worlds* (Washington, DC: Center for the Study of Intelligence, 2012), v.

⁸ John Gordon IV and John Matsumura, *The Army's Role in Overcoming Anti-Access and Area of Denial Challenges* (Santa Monica, CA: RAND, 2013), 2.

⁹ See David E. Johnson, *Hard Fighting: Israel in Lebanon and Gaza* (Santa Monica, CA: RAND, December, 2011), 45–46: "in facing hybrid opponents, joint combined-arms fire and maneuver are necessary; precision, stand-off fires are critical (but not sufficient); and responsive and adequate air, artillery, and intelligence, surveillance, and reconnaissance support are vital."

¹⁰ Nathan Freier, "Challenges to American Access: The Joint Operational Access Concept and Future Military Risk" (Washington, DC: Center for Strategic and International Studies (CSIS), January 5, 2012), available at <<http://csis.org/publication/challenges-american-access-joint-operational-access-concept-and-future-military-risk>>.

¹¹ Nathan Freier, Stephanie Sanok, and Jacquelyn Guy, *Beyond the Last War: Balancing*

Ground Forces and Future Challenges Risk in USCENTCOM and USPACOM (Washington, DC: CSIS, and Lanham, MD: Rowman & Littlefield, 2013), 13.

¹² Derek Eaton et al., "U.S. Overseas Military Posture: Relative Costs and Strategic Benefits," Research Brief, RB-9708-OSD (Santa Monica, CA: RAND, 2013), 2, available at <www.rand.org/pubs/research_briefs/RB9708>.

¹³ Gordon IV and Matsumura, 1.

¹⁴ British Army, "Transforming the British Army: Modernising to Face an Unpredictable Future," July 2012, 4.

¹⁵ Government of France, *Le Livre Blanc: Défense et Sécurité nationale* [White Paper on Defense and National Security] (Paris: Odile Jacob and La documentation Française, 2008), 130.

¹⁶ Murielle Delaporte, "French Lessons from Mali: Fight Alone, Supply Together," *Breaking Defense*, June 17, 2013, available at <<http://breakingdefense.com/2013/06/17/french-lessons-from-mali-fight-alone-supply-together/>>.

¹⁷ DOD, *National Military Strategy of the United States of America* (Washington, DC: DOD, February 2011), 8.

¹⁸ Freier.

¹⁹ DOD, *National Military Strategy*, 8.

²⁰ DOD, *Joint Operational Access Concept*, version 1.0 (Washington, DC: DOD, January 17, 2012, Distribution Statement A), ii, available at <www.defense.gov/pubs/pdfs/JOAC_Jan%202012_Signed.pdf>.

²¹ Freier.

²² Nathan Freier et al., *Beyond the Last War*, 58–67.

²³ DOD, *National Military Strategy*, 8.

²⁴ Bruno Helluy, "Airborne Joint Forcible Entry Lessons Learned from Operation Serval," lecture, Headquarters, 82nd Airborne Division, June 24, 2013. Colonel Helluy is the chief of operations for the French 11th parachute brigade.

²⁵ Delaporte.

²⁶ Eaton et al., 1.

²⁷ Michael B. Donley and General Mark A. Welsh III, Memorandum, "Fiscal Year 2013 (FY13) Near-Term Actions to Mitigate Sequestration Impacts," Secretary of the Air Force, Chief of Staff, USAF, January 7, 2013, available at <www.pscouncil.org/c/e/EventList/Sequestration/donley_letter.aspx>.

²⁸ Tyrone C. Marshall, Jr., "Sequestration Consumes Intellectual Efforts, Commander Says," American Forces Press Service, April 11, 2013, available at <www.defense.gov/news/news-article.aspx?id=119758>.

²⁹ Carl Stiner and Daniel R. Schroeder, "The Army and Joint Forcible Entry," *Army*, November 2009, 19–20, available at <www.ansa.org/publications/armymagazine/archive/2009/11/Documents/FC_Stiner_1109.pdf>.



Royal Netherlands air force F-16A Falcon patrols skies over Kosovo during Operation *Allied Force* armed with AIM-9 missiles and cluster bombs

Revisiting NATO's Kosovo Air War Strategic Lessons for an Era of Austerity

By GREGORY L. SCHULTE

Ambassador Gregory L. Schulte is a Faculty Member at the National War College. First at the North Atlantic Treaty Organization and then at the White House, he advised on the preparation and conduct of Operation *Allied Force*.

After a decade of counterinsurgency operations, the 1999 Kosovo air war is a distant memory. Unlike the grueling, ground force-centric wars in Iraq and Afghanistan, Operation *Allied Force* was a case study in coercion conducted at a safe distance to achieve limited ends using limited means. Despite flawed assumptions and the friction of a coalition operation, the North Atlantic Treaty Organization (NATO) achieved its objectives at a reasonable cost and without combat fatalities. The NATO intervention reversed ethnic cleansing in Kosovo and helped set conditions for bringing democracy to Serbia.

Operation *Allied Force* has already been analyzed in depth.¹ Yet revisiting it is

relevant as the United States prepares for future wars in an era of austerity. For such operations, when vital interests are not at stake, it is likely that coalition operations will be the norm, ends and ways will be limited, “small footprints” will be desirable, and the center of gravity will be the adversary’s will rather than its forces. These were all characteristics of the Kosovo air war.

This article analyzes the strategic logic of Operation *Allied Force* and draws lessons for future small footprint operations for limited ends using limited means.²

Strategic Context

In 1998, the former Yugoslavia was already devastated and fractured by 4 years of brutal war. Slobodan Milosevic, as leader

of Serbia, was not only a prime instigator of the conflict but also a signatory of the 1995 Dayton Peace Accords that ended the war in Bosnia. As the crisis in Kosovo began, Milosevic presided over Serbia and Montenegro, which were all that remained of the former Yugoslav federation.

Milosevic had launched his political career in Kosovo, a province of Serbia that overflowed with symbolism and history for the Serb people. His repression of Kosovo's Albanian majority had initially been met with nonviolent resistance. An armed Kosovo Liberation Army (KLA) eventually materialized, threatening Serb rule over Kosovo and the small Serbian minority living there. In 1998, Milosevic dispatched additional security forces into Kosovo to suppress the KLA. His interests, which were certainly vital to him if not to the Serb state, were to retain control of Kosovo, protect his autocratic grip on power rooted there, and maintain the international legitimacy he attained at Dayton.

NATO countries watched developments in Kosovo with a sense of foreboding. Milosevic was known as the "Butcher of the Balkans," and the heavy-handed tactics of his security forces in Kosovo gave rise to fears of another round of violence and ethnic cleansing. The United States and its NATO Allies, which had helped end the war in Bosnia after much hesitation, were committed to preventing a new conflict. If diplomacy failed, they were prepared to consider the early use of military force and shared an uncomfortable suspicion that only the threat of force or its use would move Milosevic. The countries of southeast Europe, aspiring to join NATO and the European Union (EU), were ready to cooperate closely with the Alliance. Russia, however, was wary of further NATO military operations and ready to veto a formal mandate from the United Nations (UN) Security Council.

President Bill Clinton was under increasing political pressure in the United States. While humanitarian groups and foreign policy experts fretted over a renewed prospect of war and ethnic cleansing, many in Congress and the Pentagon were pushing for an "exit" in Bosnia and reluctant to commit more forces in the Balkans. Indeed, in March 1998, the administration needed to work closely with Congress to defeat a proposed House of Representatives resolution that would have directed

the President to withdraw U.S. forces from Bosnia. To complicate matters further, the President was embroiled in a sex scandal and facing impeachment by the House and a subsequent trial by the Senate. In short, Clinton was not well positioned politically to commit military force to protect a part of the Balkans unknown to most Americans.

NATO Interests

As winter approached in 1998, Kosovo Albanians, displaced from their homes, faced the twin threats of starvation and freezing. Backed by the threat of NATO air strikes, U.S. and European diplomats convinced Milosevic to withdraw Serb security forces and allow the introduction of Organization for Security and Co-operation in Europe (OSCE) monitors. Diplomatic efforts, however, were unable to prevent a renewal of fighting when the snow began to melt in early 1999. A final push for a diplomatic settlement, conducted at a chateau in Rambouillet, France, ended in failure, though it did help unite the Kosovo Albanians and establish the broad outlines of an eventual settlement.

In contemplating air strikes in early 1999, the United States and its Allies were conscious of three basic interests at stake. The first interest was humanitarian, to prevent another round of violence and ethnic cleansing. The second was to protect regional stability, minimizing the risk of a new Balkan war. The third was to protect the credibility of NATO, which had suffered during previous Balkan wars but rebounded with the Alliance's role in implementing the Dayton Accords. An alliance is arguably a "means" not an "end," and protecting credibility can be a slippery slope. That said, NATO was indeed an important part of Europe's future security architecture and a means of achieving U.S. regional objectives.

The threats to these interests were real. A massacre of Albanian men, women, and children in the Kosovo village of Račak was a vivid reminder of Milosevic's campaign of violence and ethnic cleansing in Bosnia. Ethnic conflict in Kosovo had the potential to rekindle ethnic tensions elsewhere in the region, sparking another round of violence and a breakdown of the Dayton Accords in Bosnia, where NATO had deployed a large peacekeeping force. There was also the threat, which the Alliance took seriously, of ruptured relations with Russia. Offsetting

these threats was an important opportunity to build on NATO's growing cooperation with the United Nations and OSCE to bring an end to the Balkan wars and help realize the vision of a Europe that was whole, free, and at peace.

Ends, Ways, and Means

NATO launched Operation *Allied Force* in March 1999. As often happens in military operations, the ends, ways, and means evolved during the course of the campaign. Initially, NATO's ends were articulated as the "three Ds": demonstrate NATO resolve, damage the Serb military's ability to harm the people of Kosovo, and deter an even bloodier offensive.³ The ways to achieve these ends were simple: limited air strikes on Serb forces in Kosovo and a readiness to negotiate a political accord. In the words of one senior administration official, the strategy had shifted "from diplomacy backed by air strikes to air strikes backed by diplomacy." Means were limited to tactical air strikes and diplomacy designed to keep NATO together as the United States and its Allies awaited a clear signal by Milosevic of his readiness to withdraw Serb security forces and negotiate a settlement.

This strategy was based on the flawed assumption that limited air strikes would compel Milosevic to back down quickly. Thus, initial political and military planning assumed an air campaign of days or a few weeks when, in fact, *Allied Force* lasted over 2 months—78 days. This mistaken assumption meant that NATO had neither planned the targets nor deployed the necessary forces for a sustained air campaign. It also meant that Alliance unity was put to a longer test than initially foreseen. Perhaps the only benefit of the extended campaign was that it afforded additional time provided to "plan for success" including the establishment of a UN administration and a NATO-led peacekeeping force.

There were a number of reasons for this flawed assumption:

- First, senior U.S. diplomatic and military officials assessed that Milosevic would back down quickly, based in part on their personal experience in dealing with him. After all, the threat of air strikes had caused Milosevic to withdraw security forces from Kosovo the previous fall.

■ Second, policymakers may have drawn the wrong lessons from NATO's Operation *Deliberate Force* in 1995, in which 3 weeks of limited air strikes helped bring Milosevic to the negotiating table at Dayton. There were, however, important differences: NATO's 1995 air strikes coincided with a Bosnian-Croatian ground offensive. In addition, and perhaps more importantly, Kosovo was a more vital interest to Milosevic than the Serbian parts of Bosnia were.

■ Third, while perhaps only subconsciously, a short war assumption may have eased the political decision to intervene. Intervention was already a tough decision for the allies in the face of opposition by Russia and the resulting absence of an explicit mandate from the UN Security Council. If allied leaders had also confronted the possibility of an operation lasting 78 days, they may have decided against air strikes and restricted their approach to diplomatic pressure and economic sanctions.

After several weeks of air strikes, U.S. and allied leaders realized the need to recalibrate their strategy. Milosevic was not only failing to back down, but his security forces had launched the ethnic cleansing that NATO sought to prevent, burdening neighboring countries with a growing influx of Albanian refugees. It was increasingly apparent that Milosevic thought he could outlast the Alliance. It was also increasingly obvious that there were two centers of gravity: the unity of NATO, which Milosevic hoped to defeat, and the will of Milosevic, which was more resilient than expected.

NATO's April 1999 summit in Washington, DC, was to have commemorated the Alliance's 50th anniversary. Instead it became the venue for NATO to demonstrate its determination to prevail and to recalibrate its ends, ways, and means.

The Summit Declaration required Milosevic to:

- ensure a verifiable stop to all military action and the immediate ending of violence and repression in Kosovo
- withdraw his military, police, and paramilitary forces
- agree to the stationing of an international military presence
- agree to the unconditional and safe return of all refugees and displaced persons

and unhindered access to them by humanitarian aid organizations

- provide credible assurance of his willingness to work for the establishment of a political framework based on the Rambouillet Accords.⁴

These five requirements were effectively NATO's new ends, replacing the "three Ds" of a month prior. These new ends adapted to the growing exodus of Kosovo Albanians and added the prospect of deploying a NATO-led force in Kosovo once Serb security forces withdrew.

NATO also expanded ways of bringing pressure on Milosevic, recognizing that air strikes alone might not suffice. The summit declaration spoke of "additional measures" being undertaken by allied governments. The United States, for its part, developed and implemented an expanded "strategic campaign." This campaign, in combination with NATO air strikes, aimed to:

- degrade Serbia's capability to conduct repressive operations in Kosovo
- undermine Milosevic's pillars of power, which were identified as his security forces, state-controlled media, and close associates ("cronies")
- step up international pressure, isolate Serbia, and delegitimize Milosevic
- plan and prepare a postconflict civil and military presence
- sustain NATO solidarity.

This expanded set of "ways" was backed by a full range of diplomatic, information, military, and economic means.

Diplomatically, the Department of State worked closely with EU foreign ministers to bring pressure to bear on Milosevic and increase his isolation, using his indictment by the international war crimes tribunal in The Hague to undercut his legitimacy. The Secretary of State and her senior advisors were on the phone daily with their European counterparts to coordinate statements and diplomatic activity. The Deputy Secretary of State led negotiations involving the Russian prime minister and the EU president to back Milosevic into NATO's conditions while disabusing him of any impression that Moscow would come to his aid. These negotiations set the basis for the conflict's end game and shaped the UN Security Council resolution being developed

in New York to terminate the conflict on NATO's conditions and establish the basis for postconflict stabilization.

On the information side, public diplomacy backed diplomacy by highlighting NATO resolve and unity as well as the atrocities being committed by forces under Milosevic's command. Information operations directed at the Serb people, Serb security forces, and Milosevic cronies sought to undercut support for Milosevic's actions and encourage defections.⁵ These messages were delivered by multiple media including a "ring around Serbia" of radio transmitters in neighboring countries. Transmitting broadcasts from Voice of America and the British Broadcasting Corporation, the ring was designed to break Milosevic's monopoly of the airwaves. In addition to delivering munitions, NATO F-16 fighters and B-52 bombers dropped leaflets targeted at Serb forces and the population more broadly. Those dropped to Serb forces warned of the lethality of NATO forces and sought to encourage defections by reporting on draftee soldiers leaving the fighting in Kosovo to protect protesters in their villages against military police.

Militarily, tactical air strikes were augmented by strategic air strikes into Serbia. These included raids against high-visibility targets such as the Ministries of Defense and Interior, government television, bridges, and electrical infrastructure. The strikes, particularly against targets associated with Milosevic's cronies, were carefully coordinated with information operations aimed at undercutting Milosevic's sources of power. Steps were taken to reduce the risk of civilian casualties in populated areas, though media images of a European capital being bombed shook European public support. Less visibly, NATO ships began monitoring a U.S. and EU oil embargo on Serbia, and the Alliance stepped up planning and preparations for the introduction of NATO-led ground forces after the air strikes. Some NATO forces were prepositioned in theater to allow for early introduction of a peacekeeping force.

Economically, NATO Allies surged humanitarian relief and economic assistance to the neighboring countries struggling with a growing number of Albanian refugees. NATO deployed a task force to Albania to help with relief efforts, and its peacekeeping force prepositioned in Macedonia also

helped to construct refugee camps. The United States and European Union targeted sanctions, including asset freezes and travel bans, on key Milosevic supporters. Targeted individuals, who were used to a luxurious lifestyle, were suddenly unable to travel outside Serbia and grew concerned about accessing their bank accounts in London or Paris. Economic sanctions typically take a long time to have an impact. In the case of Kosovo, their main effect was probably psychological, increasing pressure on Milosevic's cronies and encouraging them to disassociate themselves with his regime.

Fog and Friction

NATO's realignment of its ends, ways, and means was essential to its ultimate success when the war grimly ground on longer than anticipated. That said, its longer duration gave added opportunity for fog and friction to play their inevitable role, complicating operations and adding unforeseen developments.

One unwanted surprise was NATO's inadvertent bombing of the Chinese embassy in Belgrade. This precise raid against precisely the wrong target disrupted diplomatic efforts to negotiate a UN Security Council resolution to terminate the conflict on NATO's terms. In doing so, it undoubtedly renewed the hope of Milosevic and his supporters to outlast the Alliance. Together, these two effects probably added 1 or 2 weeks to the armed conflict. The strike also tested the unity of the Alliance, as did other strikes that accidentally killed both Serb and Albanian civilians. NATO ambassadors implored the military commanders to avoid collateral damage—as though wars could be conducted without human cost.

Alliance decisionmaking was a source of friction. Key targeting decisions were subject to consensus decisions by all Allies. The President needed to make multiple phone calls to other leaders before NATO agreed to augment the air strikes with more strategic targets. Two Allies pushed for “pauses” despite no sign of willingness by Milosevic to meet NATO's stated conditions. Coalition politics and indecision circumscribed the allied ability to escalate air strikes and deliver the “shock and awe” that might have decisively shaken the will of Milosevic and his supporters. NATO unity was indispensable to success, but the price of unity was time and agility.

War Termination

Despite fog and friction, the mounting pressures on Milosevic had a cumulative effect:

- Milosevic was increasingly isolated with no obvious way out. NATO's unity was holding, its conditions were not changing, and its air strikes were increasing in scope and severity. The EU and UN Secretary-General had aligned themselves with NATO. Countries in the region were supporting NATO politically and militarily. Russia was delivering NATO's message and not offering an alternative course.

- Milosevic's own political survival was increasingly at risk. He had lost international and domestic legitimacy including through his international indictment for war crimes. His wife, Mira, was worried about the safety of their family. His advisors were divided and his cronies were fleeing the country.

- Milosevic's control of Kosovo was increasingly at risk. Serb military and police forces were under growing pressure from NATO as the weather improved and U.S. A-10 ground attack aircraft arrived. There was mounting concern in Serbia about a NATO ground invasion, prompted in part by the prepositioning of NATO peacekeeping forces in the region. The Kosovo Liberation Army had launched offensive operations under the cover of NATO air strikes.

- Milosevic was also offered some ways to help justify his acceptance of NATO conditions domestically. One important “face saver” was Moscow's involvement in the final diplomacy and prospect of Russian forces in a follow-on peacekeeping force. Other face-savers included public emphasis on the post-conflict role of the UN rather than NATO and recognition that Kosovo, while substantially autonomous, would remain within the territory of the Yugoslav federation.

Milosevic conceded to NATO's conditions after 78 days. It can be a matter of debate whether NATO needed that long to bring the right elements of power to bear or whether Milosevic needed 78 days before he was prepared to meet NATO's conditions. Ultimately, the war ended because the will of NATO overcame the will of Milosevic. NATO did not defeat Serb forces militarily; rather, the Alliance and its members applied a wide range of power that eventually compelled Milosevic to meet its demands.

Exactly why Milosevic conceded is unlikely ever to be known. He did not explain his decision and, having died while on trial in The Hague, never will. While different theories exist,⁶ it seems reasonable to conclude that the cumulative effect of diplomatic isolation, military strikes, information operations, and targeted sanctions left Milosevic increasingly uncertain of his grip on power and on Kosovo. He probably concluded that meeting NATO requirements, with the face savers provided, better served his own vital interests than continuing to try to outlast a still-unified Alliance.

A War of Limited Ends Using Limited Means

Air strikes disrupted but did not defeat Serb ground forces operating in Kosovo. Some have thus criticized NATO's decision, announced at the outset of the operation, to exclude the use of ground forces in combat operations. At a minimum, some critics argue, the prospect of ground attack would have forced Serb forces to mass and become more vulnerable to air interdiction. The buildup of ground forces might also have kept Milosevic from thinking that he could merely hunker down and outlast NATO air strikes.

However, allied leaders had valid reasons for their decision. In the United States, the Clinton administration was concerned about securing domestic support for another military intervention in the Balkans when Congress was already pressing to remove ground forces from Bosnia. Indeed, shortly after Operation *Allied Force* began, the U.S. House of Representatives adopted a resolution prohibiting funds for the deployment of ground forces. The administration was similarly concerned about securing support from allies whose own parliaments would be reluctant to commit ground forces to combat. The administration recognized that airpower gave NATO forces an asymmetric advantage while substantially reducing the risk of casualties. While important interests were at stake, none were so vital, in the judgment of senior policymakers, as to recklessly endanger American lives.

NATO's ends, like its means, were also limited. Operation *Allied Force* sought to compel Milosevic to withdraw Serb forces from Kosovo and permit the return of refugees and the establishment of an international presence. The operation was



A-10 Warthog is prepared by maintenance personnel at Gioia del Colle Air Base, Italy, for mission over Kosovo in support of NATO Operation *Allied Force*

not aimed at making Kosovo independent of Serbia or removing Milosevic from power. It is unlikely that allied governments would have agreed to either end or that they would have committed the necessary forces. It is also unlikely that Milosevic would have conceded to his own political demise or that Russia would have cooperated to the limited extent it did.

Nevertheless, NATO Allies increasingly recognized that peace in the Balkans would require democracy in Serbia, which was code for the ouster of Milosevic. An unstated goal of NATO's intervention was to leave Milosevic weaker politically rather than stronger. Undermining Milosevic's legitimacy and his pillars of support encouraged his capitulation and also hastened the day he would depart.

Sixteen months after the air strikes ended, Milosevic was out of power, ousted by the Serb people with international support.⁷ Military means helped set the condition for regime change. However, regime change was neither the established end nor the direct consequence of *Allied Force*.

Relevance to Future Operations

In January 2012, President Barack Obama and then-Secretary of Defense Leon Panetta issued a new defense strategy that looks beyond the wars in Afghanistan and Iraq.⁸ The strategy calls for armed forces capable of conducting a broad range of missions, in a full range of contingencies, and in a global context that is increasingly complex,

all with more limited resources. Opportunities for savings come from reducing the ability to fight two regional conflicts at the same time and from not sizing the force to conduct large-scale stability operations for prolonged periods.

In implementing this strategy, General Martin Dempsey, Chairman of the Joint Chiefs of Staff, has promulgated a concept for joint operations that calls for "globally integrated operations" able to "seize, retain, and exploit the initiative in time and across domains."⁹ Part of this concept is a more pronounced role for "small-footprint" capabilities such as cyberspace, space, special operations, global strike, and intelligence, surveillance, and reconnaissance. These represent unique sources of U.S. military advantage that do not entail large or long-term ground force commitments.

This strategy and concept suggest a return to limited military operations such as *Allied Force*, particularly when our vital interests are not directly threatened. NATO's Operation *Unified Protector* in Libya provides a recent example in which the administration limited the scale and duration of the U.S. contribution and excluded the use of ground forces entirely. As we consider such operations, NATO's intervention in Kosovo offers the following lessons.

Understand the Enemy. In limited wars such as *Allied Force*, the center of gravity is likely to be the will of the adversary rather than the adversary's forces. Success thus results from redirecting the

enemy's decisions rather than routing its military. Said differently, forceful coercion takes the place of brute force. Forceful coercion requires in-depth understanding of the enemy leadership and its worldview and interests. It also requires a sound understanding of how the enemy makes and carries out its decisions and which individuals and factors play in that process. In *Allied Force*, mapping influence networks within the leadership was just as important as mapping supply routes for the military. A mistaken assumption, such as how quickly an adversary leader would back down, could have a significant impact.

Recognize the Limits of Coercion. Even with a solid understanding of the enemy, forceful coercion has limits. While the United States and its allies had important interests at stake in the Kosovo conflict, they were not as vital as Milosevic's interests in political survival and control of Kosovo. Such an asymmetry of interests may work against the United States when it is prepared only to use limited means against a resolute adversary. Academic research warns of the risk of failure in coercion when the stakes are asymmetric and an adversary thinks, as Milosevic probably did for a time, that our will is more vulnerable than his.¹⁰ Moreover, without employing overwhelming force to defeat adversary forces, the impact of forceful coercion may be more cumulative than decisive. Building up over time, and hence taking more time, the cumulative effect of coercion may provide less certainty of success and

more opportunity for fog and friction to take their toll. Like *Allied Force*, most wars, and particularly limited wars, take longer than the generals plan and the politicians hope.

Bring a Broad Range of Power to Bear.

With military means limited, success will be even more dependent on employing a broad range of nonmilitary means, from overt diplomacy to covert action. As with Kosovo, air strikes alone are unlikely to suffice. In many cases, military force may play a supporting role, such as deterring provocations or reassuring allies, while the main attacks on the adversary's will are conducted through diplomatic, informational, and economic means. Good strategic sense counsels against ruling out the use of the full range of military capabilities including ground forces; however, as with Kosovo (and Libya since), domestic and international conditions may make this unavoidable. In such cases, the United States may need to build up a reliable partner on the ground not only to win the war but also to influence the peace. In some cases, allied forces may fill this gap. In others, the United States might be forced to confront the inevitable risks of relying on indigenous forces such as the Kosovo Liberation Army that are not well known to us and may not share our ends or our view of acceptable means.

Limited Ends to Reflect Limited

Means. Limiting means may be necessary to build and sustain domestic and international support, as was the case with *Allied Force*. This will often require limiting the ends. Thus, in the case of Kosovo, NATO's ends were limited to protecting the population in Kosovo and did not extend to making Kosovo independent or ousting Milosevic from Belgrade. Either would have substantially complicated support for the operation and the associated diplomacy, and the second would have likely required a major ground component. In coercive operations using limited means, changing a regime's behavior may be more feasible than changing the regime. Even then, the behavior changes sought may need to be limited in the absence of a sustained presence on the ground or in the vicinity to ensure compliance. Political leaders will need to exercise discipline to ensure that the political dynamics of building domestic and international support do not cause ends to outpace the means. Political leaders may not want, for example, to draw "red lines"

or declare behavior "intolerable" if they and their nations are not ready to commit the means necessary to enforce the red lines or stop the behavior. Ends must reflect means, and strategy should drive declaratory policy, not the reverse.

Be Ready for Adversity and Surprise.

Kosovo was complex politically and militarily. Future wars of limited ends and means may be even more complex. Many potential adversaries are developing capabilities to undercut the asymmetric advantages demonstrated by the United States and its allies in Operation *Allied Force*. Imagine conducting the same air operations in an antiaccess/area-denial environment against an enemy with more sophisticated air defenses and capable of jamming our satellite communications and navigation. Imagine operating against an adversary who can respond asymmetrically with cyber or terror attacks on our homeland. Future wars may also not benefit from the coalition unity demonstrated by NATO or the political and logistical support from neighboring countries. Sanctuaries, weak and ambivalent governments, and transnational forces may create a more challenging regional context. Finally, like all wars, future conflict will suffer from fog and friction and the element of surprise. Small footprints do not necessarily translate to small risks. It may not take many accidents like the strike on the Chinese embassy to break a fragile coalition or domestic consensus.

Operation *Allied Force* lasted longer than planned and for a time helped precipitate the ethnic cleansing it sought to prevent. Yet NATO achieved its objectives at reasonable cost and, in retrospect, in reasonable time. Allied cohesion held and Milosevic's will broke.

As the United States looks beyond Iraq and Afghanistan, *Allied Force* offers cautionary lessons about the efficacy of future operations for limited ends using limited means. Modesty of means requires modesty in ends. Imperatives to success include understanding the enemy, recognizing the limits of coercion, employing a wide range of national power, and being ready for adversity and surprise. Even then, policymakers need to think long and hard about the employment of military power and not be "beguiled"¹¹ by hopes of quick success free of cost and adverse consequence. **JFQ**

NOTES

¹ For thoughtful analysis of Operation *Allied Force* and associated lessons learned, see Wesley K. Clark, *Waging Modern War* (New York: PublicAffairs, 2001); Ivo H. Daalder and Michael E. O'Hanlon, *Winning Ugly: NATO's War to Save Kosovo* (Washington, DC: Brookings Institution, 2000); Robert A. Pape, "The True Worth of Air Power," *Foreign Affairs* 83, no. 2 (March/April 2004); Daniel L. Byman and Matthew C. Waxman, "Kosovo and the Great Air Power Debate," *International Security* 24, no. 4 (Spring 2000); Adam Roberts, "NATO's 'Humanitarian War' over Kosovo," *Survival* 41, no. 3 (Autumn 1999).

² The analysis uses elements of strategic logic taught at the National War College.

³ President William J. Clinton, Statement on Kosovo, The White House, March 24, 1999.

⁴ Statement on Kosovo issued by North Atlantic Treaty Organization (NATO) Heads of State and Government, NATO Press Release S-1(99)62, April 23, 1999.

⁵ Information operations subsequently helped deter an attack on Montenegro. See Gregory L. Schulte, "Deterring Attack: The Role of Information Operations," *Joint Force Quarterly* 33 (Winter 2002–2003), available at <www.ndu.edu/press/lib/pdf/jfq-33/JFQ-33.pdf>.

⁶ These are the author's best judgments. Other theories can be found in Stephen T. Hosmer, *Why Milosevic Decided to Settle When He Did* (Santa Monica, CA: RAND, 2001); Barry R. Posen, "The War for Kosovo: Serbia's Political-Military Strategy," *International Security* 24, no. 4 (Spring 2000).

⁷ Gregory L. Schulte, "Overthrowing Milosevic: Lessons for Syria?" *The American Interest*, August 15, 2012, available at <www.the-american-interest.com/article.cfm?piece=1307>.

⁸ *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Department of Defense, January 2012), available at <www.defense.gov/news/Defense_Strategic_Guidance.pdf>.

⁹ *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: The Joint Staff, September 2012), available at <www.jcs.mil/content/files/2012-09/092812122654_CCJO_JF2020_FINAL.pdf>.

¹⁰ Alexander L. George and William E. Simons, eds., *The Limits of Coercive Diplomacy*, 2nd ed. (Boulder, CO: Westview Press, 1994); Alexander L. George, *Forceful Persuasion: Coercive Diplomacy as an Alternative to War* (Washington, DC: United States Institute of Peace, 2009). For a good analysis of the challenges of coercion with air power, see Daniel L. Byman, Matthew C. Waxman, and Eric Larson, *Air Power as a Coercive Instrument* (Santa Monica, CA: RAND, 1999).

¹¹ Alexander George wisely warned about the "beguiling" attractiveness of coercive diplomacy in George and Simons, 9.



KC-135 Stratotanker prepares to refuel C-17 Globemaster III en route from Tripoli to Boston

The Responsibility to Protect **The Libya Test Case**

By MARGARET H. WOODWARD and PHILIP G. MORRISON

The history of the air campaign over Libya has yet to be fully written. What might appear as yet another “operation in the Middle East” to the casual observer is in fact a revolution in global politics and the role of the United Nations (UN) as a global leadership body. The world collectively

redefined what sovereignty is and what it means to the people of the world. Operation *Odyssey Dawn* consummated the resolve of the international community to protect the global citizenry from atrocities, even those originating in their own state. *Odyssey Dawn* also presented significant challenges since it was the first operation of its kind and was

correspondingly governed by novel objectives, rules of engagement, and limitations. The result of the operation has far-reaching political and military implications that are important for both statesmen and military leaders to understand. To fully grasp the significance of *Odyssey Dawn*, it is important to understand the recent history that led to the events of the March 2011 air campaign.

While state-sponsored atrocities against domestic populations are not new, the scale, ferocity, and international awareness of such crimes were far greater in the

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20th century than in any other period. The events truly affronted the international community and eventually led to a revolution of political ideas.

Tribal violence in Rwanda between the Hutus and Tutsis in 1994 turned into a bloody civil war that removed the minority Tutsis from power and placed the previously disenfranchised Hutus in control of the country. The Hutus had chafed under the brutal rule of the Tutsis for decades, so once the Hutus seized power, they started a campaign to systematically destroy Tutsi resistance and punish them for their previous actions. This led to the rampant murder of Tutsis and eventually spiraled into widespread genocide. Although the United Nations initially sent peacekeeping troops to Rwanda, the conflict was quickly reclassified as a civil war and the UN had to extricate itself from the situation in accordance with its charter.¹

This left soon-to-be Secretary-General Kofi Annan sorely disappointed by the inability of the global community to aid those who were not protected by their own governments. The situation was desperate as women and children were raped and murdered and the global community was forced to watch, unable to intervene through the United Nations. By the end of the conflict, over 800,000 people had been executed at the hands of their own government in the short period of 100 days.²

Even while violence was erupting in Rwanda, the Balkan region was thrown into violent turmoil. Fractious new nations that separated from Yugoslavia found themselves faced with national identity crises following the disintegration of the former communist nation. While the communist dictator Josip Tito had managed to suppress much of the ethnic and religious hatred in the region, his death and the collapse of the Yugoslavian nation revived old hatreds and religious strife. The most conflicted of these fledgling nations was the small country of Bosnia-Herzegovina. The rift among the predominantly Orthodox Serbian people, Catholic Croats, and Muslim Albanians led to genocide by the Serbs against the Albanians during the late 1990s. The murder of over 100,000 ethnic Albanian Muslims eventually forced the North Atlantic Treaty Organization (NATO) to intervene in 1999, while UN peacekeepers stationed in the country had to remain neutral as they stood by witness-

ing the atrocities.³ Unlike Rwanda, where no one intervened and the world sat idly by, despite impassioned pleas for intervention, NATO intervention in Bosnia was met with as much controversy as was the lack of intervention in Rwanda. Russia and China both argued that NATO illegally circumvented the UN Security Council (UNSC) by acting without its backing,⁴ but the action was later justified by UNSC Resolution (UNSCR) 1244.⁵

In the Millennium Report of the UN Secretary-General titled *We the Peoples*, Kofi Annan specifically addressed both the tragedies of Rwanda and Bosnia and, for the first time, suggested that the world body should intervene in the case of atrocities within the borders of sovereign nations under certain circumstances.

Humanitarian intervention is a sensitive issue fraught with political difficulty and not susceptible to easy answers. But surely no legal principle—not even sovereignty—can ever shield crimes against humanity. Where such crimes occur and peaceful attempts to halt them have been exhausted, the UNSC has a moral duty to act on behalf of the international community. The fact that we cannot protect people everywhere is no reason for doing nothing when we can. Armed intervention must always remain the option of last resort, but in the face of mass murder it is an option that cannot be relinquished.⁶

The significance of the Secretary-General's remarks was not lost on the global community. In an effort to address these concerns, the government of Canada set up the International Commission on Intervention and State Sovereignty (ICISS) in 2001. The commission submitted a report titled *The Responsibility to Protect* to the UN General Assembly and set out to develop a legal construct through which the international community could protect those who were not protected by their own governments.

The concept of the responsibility to protect (R2P), developed by the ICISS report, hinges on the belief that sovereignty grants the privilege to nations to govern independently, but it also comes with a responsibility to the people who are governed. The responsibility is for governments to protect their people from “avoidable catastrophe—from mass murder and rape, from starvation—but that when they are unwilling or unable to do

so, that responsibility must be borne by the broader community of states.”⁷ The ICISS report was significant not only because it addressed the issue of humanitarian intervention and framed it as a legal construct, but also because it attempted to lay out a prescriptive method for operational execution. It does so by dividing R2P into three distinct parts: responsibility to prevent, responsibility to react, and responsibility to rebuild. This allows for international support prior to an atrocity and for normalization after intervention has occurred.

At the 2005 World Summit, the ICISS work was unanimously ratified by the UN General Assembly in paragraphs 138 and 139 of that assembly's resolution:

138. Each individual State has the responsibility to protect its populations from genocide, war crimes, ethnic cleansing and crimes against humanity. This responsibility entails the prevention of such crimes, including their incitement, through appropriate and necessary means. We accept that responsibility and will act in accordance with it. The international community should, as appropriate, encourage and help States to exercise this responsibility and support the United Nations in establishing an early warning capability.

139. The international community, through the United Nations, also has the responsibility to use appropriate diplomatic, humanitarian and other peaceful means, in accordance with Chapters VI and VIII of the Charter,⁸ to help to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity. In this context, we are prepared to take collective action, in a timely and decisive manner, through the Security Council, in accordance with the Charter, including Chapter VII,⁹ on a case-by-case basis and in cooperation with relevant regional organizations as appropriate, should peaceful means be inadequate and national authorities are manifestly failing to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity. We stress the need for the General Assembly to continue consideration of the responsibility to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity and its implications, bearing in mind the principles of the Charter and international law. We also intend to commit ourselves, as necessary and appropriate, to helping States



U.S. Air Force (Kasey Close)

Airmen prepare to load 2,000-pound bomb into B-1B Lancer for mission in support of Operation *Odyssey Dawn*

build capacity to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity and to assisting those which are under stress before crises and conflicts break out.

The next Secretary-General, Ban Ki-moon, was equally determined to ensure R2P was implemented and not simply diplomatic rhetoric. He further detailed the implications of the 2005 summit's resolution in his 2009 report *Implementing the Responsibility to Protect*. Here he detailed the responsibilities of the state and the international community as well as the importance of timely and decisive action.¹⁰

All this laid the stage for the events that would unfold in Libya as the "Arab Spring" spread from one North African state to the next, eventually sparking off the now famous protests in Benghazi during February 2011. While the protests associated with the Arab Spring were not directly associated with R2P, it was the reaction of the Libyan government, led by Muammar Qadhafi, that caught the attention of the international

community. Qadhafi on numerous occasions ordered security forces and mercenaries to open fire on unarmed protesters, leading to the death of hundreds of citizens. He also ordered his aircraft and artillery to fire on civilian populations. These actions led the UNSC to refer Qadhafi to the International Criminal Court for war crimes on February 26, 2011,¹¹ and led to the first UN decision to intervene in the domestic affairs of a nation, citing the responsibility to protect, on March 18, 2011.

On March 19, Operation *Odyssey Dawn* was under way, tasked with protecting the Libyan people from their own government in accordance with UNSCR 1973, which allowed for any necessary action to protect the civilian population of Libya and the implementation of a no-fly zone over the country, but did not allow for foreign troops to set foot on Libyan soil.¹² So in addition to being the first test of R2P, *Odyssey Dawn* was almost purely an air operation with coalition partners participating under a UN mandate.

The lessons from Iraq and Afghanistan taught coalition forces the value of protect-

ing innocent civilians in order to gain public trust when thwarting aggressors attempting to destabilize civilians' way of life. But protecting a populace is different from ensuring that innocent women and children are safe and provided with relief assistance. For the first time in history, a foreign military force was tasked by the United Nations to protect a society when the internal mechanisms of its nation failed to protect it, and that force was a complex coalition of militaries with different capabilities that was prohibited from occupying ground within the battlespace.

Planning for Operation *Odyssey Dawn* began in late February. As the United Nations was adopting UNSCR 1970, which demanded that the Libyan government end the violence,¹³ 17th Air Force was standing up 24/7 operations and was tasked with planning for a no-fly zone. The time between the start of crisis action planning and the first strike was merely 21 days. During those critical 3 weeks, the military situation on the ground and the political environment were chaotic. The international community vacillated and Washington insiders were skepti-

cal that the United States would get involved in yet another conflict in the region. This highly dynamic environment created a great challenge to planners, who were presented with new objectives, approaches, and priorities every day.

When UNSCR 1973 was passed, planners were unaware of the precedent that had been set, but they knew that what the UN had authorized presented a unique military objective and many challenges. The plan was to start by creating a permissive environment for coalition aircraft to operate in. This would maximize military effects, minimize risk to coalition forces, and limit expansion of committed forces due to surface-to-air casualties. The first task was to shut down Libyan air operations and air defenses. This represented the first layer of the onion that needed to be peeled back before airpower could discharge the task of protecting the Libyan people. Specifically, the longer range surface-to-air missiles that could threaten the Airborne Warning and Control System, Joint Surveillance and Target Attack Radar System, and tankers needed to be disabled immediately, followed by the rest of the Libyan integrated air defense system (IADS).

Although dismantling a nation's IADS is never easy, it is a familiar operation for air planners. The challenge to gain air superiority and establish the no-fly zone was next. Aircrews generally strike two types of targets: fixed and mobile. Attacks on fixed targets are typically planned ahead of time and have clear objectives, such as bombing a command bunker or striking a critical node in a power or communications network. Mobile targets are typically identified in a more dynamic environment and in close coordination with fielded forces that have real-time intelligence about the situation on the ground. The mandate in UNSCR 1973 that the coalition not field an occupying ground force complicated this type of targeting. The solution was to use U.S. crews trained to fly strike coordination and reconnaissance (SCAR) missions when operating in close proximity to the civilian population. These crews were able to find, fix, and finish targets from the air without confirmation from ground forces.

In traditional warfare, forces have a clear enemy and know who their allies are, but not much was known about the resistance in Libya, and the United Nations was not taking sides. All that was known was

that the Libyan government had perpetrated crimes against the population, and it was the coalition's responsibility to make sure no one else on either side did it again. This environment placed a huge burden on the aircrews, who had to make difficult decisions while striking tactical targets, knowing a mistake would have huge strategic implications. In addition to the difficult task these airmen faced, they were operating within an ad hoc coalition of operational partners, including some who had never worked with each other and many with systems that did not operate well together. The professionalism, training, and experience of those coalition aircrews made this extremely complex operation possible.

The translation of R2P from diplomatic theory to daily target selection was made more difficult by unique command structures and the coalition environment, which added to the complexities of execution from both a policy and a capability standpoint. Few of the partners possessed all the capabilities needed to perform many of the command and control, targeting, and integration functions required in this type of dynamic air operation. Additionally, the tactical systems and training needed to make many of the surgical dynamic strikes were resident with only the most advanced partners.

The importance of a military coalition in such an operation was far more significant than the capabilities that individual nations brought to the table. It signified the global community's commitment to stand against the criminal activities of a government that perpetrated crimes against its own people. In the case of Libya, Washington felt strongly about transitioning to a non-U.S.-led operation, and since the majority of the partners were also NATO members, the decision seemed clear. On March 31, 2011, a mere 13 days after the first sorties were launched, the U.S. command element transferred operational control to NATO. Operations continued under NATO-led Operation *Unified Protector* for an additional 7 months, when the rebel leaders had created a National Transitional Council and officially declared Libya liberated. The events in Libya since have been tumultuous, but it is important to remember that R2P is not about nation-building or removal of national leaders. The mandate is simply to protect innocent civilians from violence, which was accomplished in Libya.

It is important to note that Russia and China, which hold veto authority on the Security Council, abstained from the vote on UNSCR 1973. However, after the military intervention began, Russian Premier Vladimir Putin expressed concern, which was echoed by the Chinese Communist Party, that R2P was an excuse for the United States, United Kingdom, and France to forward their political and economic interests in the region and not the altruistic protection of civilians.¹⁴ Whether Russia and China truly believe this, it will be difficult for them to either vote for or abstain from future UNSC resolutions to enforce R2P without these statements reverberating.

R2P will continue to be debated as the United Nations struggles with future examples of civilian abuse by those in power. The precedent has been set in Libya, but it is important to remember that international order is not governed by precedent as much as *realpolitik*. The questions that remain are whether future R2P interventions will be authorized and under what unique circumstances some of the more reticent UNSC member nations would allow for intervention. Examples of civilian casualties emerging from the fighting in Syria could justify intervention in accordance with R2P, assuming all of the preceding measures were taken, but the political will of the UNSC is notably absent. This begs the question of whether Operation *Odyssey Dawn*'s mission to shoulder R2P will be the first of many operations to protect those who cannot defend themselves or merely a historical footnote, relegating enforcement of R2P to the long list of good ideas that failed to take hold. As Kofi Annan stated, "The fact that we cannot protect people everywhere is no reason for doing nothing when we can."¹⁵

If R2P is to be implemented again as a justification to act, it will certainly include a far more restrictive set of limitations, and the approval of Russia and China may prove more difficult to obtain. These nations and other UNSC member states are motivated by national agendas leading to permanent member intransigence, watered-down authorizations, and bureaucratic entrenchment. Overcoming these agendas will prove crucial to the UNSC approving action by citing R2P in the future. But other obstacles exist outside of the political arena, not the least of which is the military might of potential adversaries.

Idealism aside, no one will attempt to enforce R2P when the object state is capable of inflicting significant harm on the force prosecuting the action. That begs the question of how much perceived risk contributing nations would be willing to undertake to defend the citizenship of a foreign nation. As seemingly novel as the air-only approach appeared, it may be the means for future R2P enforcement because it is less risky when applied against less sophisticated states. While the claim that airpower can unilaterally win major conflicts is a little far-fetched, its ability to win more limited objectives while avoiding long-term entanglement is well documented. Historically, airpower has been able to accomplish this at a much smaller human cost than surface forces could. With these considerations in mind, for R2P enforcement to be exercised again it would require that none of the UNSC permanent member nations have close ties to the offending nation, the offending nation does not have credible means of inflicting harm on coalition airpower, and the environment is favorable for airpower enforcement.

Libya was a perfect environment for R2P enforcement because its leadership lacked meaningful allies and significant military capability and resided in a desert where it is hard to hide from air strikes. Even if another perfect case arises, we must be careful not to use *Odyssey Dawn* as a template. That does not mean that valuable lessons cannot be drawn from the conflict.

Given that an air-centric solution to future operations such as *Odyssey Dawn* is likely, it is important to ensure that U.S. airpower providers remain prepared to fight independent of surface forces. The lesson the United States should take away from the Libya operation is that it must retain military flexibility. As our forces work to enhance joint integration among sister Services, we must not come to rely too heavily on other component forces. The ability to conduct SCAR missions was critical to making *Odyssey Dawn* possible and highlights the need for such organic capabilities. Despite future fiscal constraints, we must retain vital resources that allow for this type of flexibility and enhance them when possible. Additionally, we must purchase and train with a variety of munition types and yields. Variable yield warheads allow for surgical strikes with adequate stopping

power while minimizing collateral damage. This will be critical as we prepare to engage in operations spanning the spectrum of conflict, requiring us to find new ways to harness violence in the pursuit of our objectives. Finally, we must train our warfighting leaders from the start to make critical decisions in a dynamic environment. This can be done by seeking out highly promising young officers and deliberately placing them in command and control billets such as the Combined Air Operations Center and the Joint Operations Center to foster operational decisionmaking. While the U.S. military creates independent-minded leaders better than anyone in the world, we must redouble our effort. Warfare is constantly evolving. As we find new ways to apply coercive force against our adversaries in new regions, we will continue to see military leaders challenged with unforeseen scenarios. The threat from contested airspace and the challenges governed by political constraints are just a few types of the dynamic environments our Airmen will face. The specter of communication disruption, which is the new fog of war, necessitates that we focus on training to make distributed operations viable and more than just a catch phrase. It is critical that we inculcate the broad range of knowledge necessary to best equip those leaders and empower them to lead at all operational levels and within complex coalition environments.

The legacy of R2P politically, regardless of future implications for military intervention, is its implications for sovereignty. R2P is arguably the most radical adjustment to sovereignty since the Peace of Westphalia was signed in 1648. Now sovereignty does not simply protect the nation; it also protects the citizens from the nation. This concept is a victory for democracy because it pledges to support sovereign rule only when it protects the populace it governs. **JFQ**

NOTES

¹ United Nations (UN) Charter, Chapter II, Article 2, Paragraph 1, states, the "Organization is based on the principle of the sovereign equality of all its Members." Paragraph 7 states, "Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice

the application of enforcement measures under Chapter VII."

² "Rwanda: How the genocide happened," BBC, December 18, 2008, available at <<http://news.bbc.co.uk/2/hi/1288230.stm>>.

³ "Bosnian Genocide," *History.com*, n.d., available at <www.history.com/topics/bosnian-genocide>.

⁴ Russian President Boris Yeltsin was prepared to use UN Security Council veto authority to "block action in the Balkans, but never had the opportunity when [the North Atlantic Treaty Organization] made an unprecedented move of acting unilaterally without a UN resolution." See Clara Portela, *Humanitarian Intervention, NATO and International Law: Can the Institution of Humanitarian Intervention Justify Unauthorised Action?* (Berlin: Berlin Information-center for Transatlantic Security, December 2000).

⁵ See "NATO," *Politics.co.uk*, 2012, available at <www.politics.co.uk/reference/nato>.

⁶ Kofi A. Annan, *We the Peoples*, Millenium Report (New York: UN, 2000).

⁷ International Commission on Intervention and State Sovereignty (ICISS), *Responsibility to Protect* (Ottawa: International Development Research Center, 2001).

⁸ Chapters VI and VIII of the UN Charter address Pacific Settlement of Disputes and Regional Arrangements, respectively.

⁹ Chapter VII addresses Action with respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression.

¹⁰ Ban Ki-moon, *Implementing the Responsibility to Protect*, Assembly Report (New York: UN, 2009).

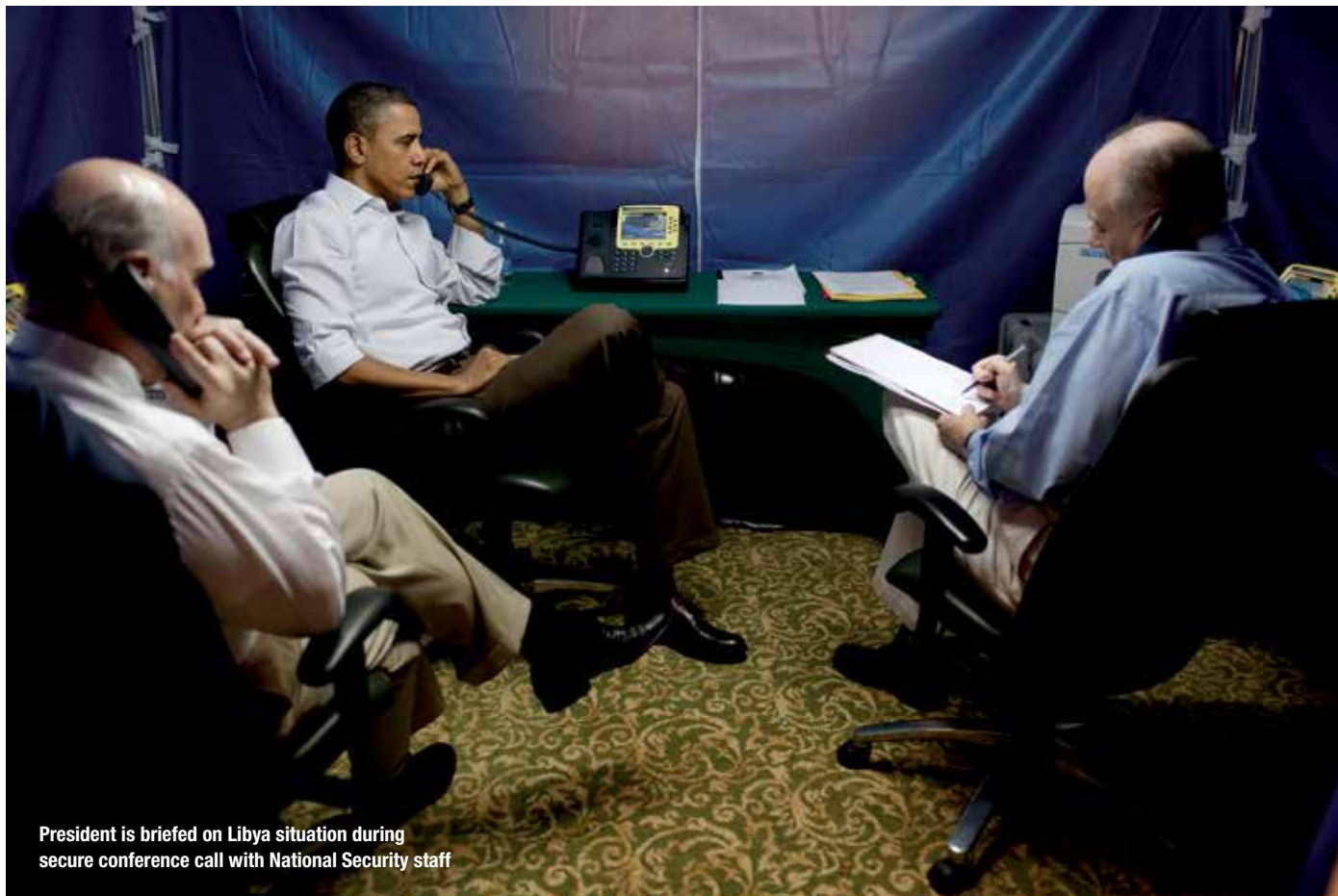
¹¹ A warrant for Muammar Qadhafi was issued June 27, 2011, by the International Criminal Court. See International Criminal Court, "ICC-Press and Media-Press Releases," June 27, 2011, available at <www.icc-cpi.int/NR/exeres/D07229DE-4E3D-45BC-8CB1-F5DAF8370218.htm>.

¹² Authorizes Member States that have notified the Secretary-General, acting nationally or through regional organizations or arrangements, and acting in cooperation with the Secretary-General, to take all necessary measures, notwithstanding paragraph 9 of resolution 1970 (2011), to protect civilians and civilian populated areas under threat of attack in the Libyan Arab Jamahiriya, including Benghazi, while excluding a foreign occupation force of any form on any part of Libyan territory. See United Nations Security Council, "UNSC Resolution 1970," New York, 2011.

¹³ Ibid.

¹⁴ John Chan, "China and Russia criticize Libyan bombing campaign," *World Socialist Web site*, March 25, 2011, available at <<http://wsws.org/articles/2011/mar2011/chru-m25.shtml>>.

¹⁵ Annan.



The 2011 Libya Operation War Powers Redefined?

By JAMES P. TERRY

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The recent hostilities in Libya between government forces of the late Muammar Qadhafi and insurgents have once again raised issues concerning whether a U.S. President can insert combat forces for more than 60 days without securing congressional approval. For more than 35 years, the War Powers Resolution¹ has required that all Presidents meet the criteria for compliance including prior consultation with Congress, fulfillment of reporting requirements, and

securing congressional authorization within 60 days of the introduction of forces.²

The War Powers Resolution has been much maligned, both by President Richard Nixon at the time and by each succeeding President. In fact, every President acting under the resolution has taken the position that it is an unconstitutional infringement on the President's authority as Commander in Chief.³

In brief, the War Powers Resolution states that the President's authority as Commander in Chief to introduce military forces into hostilities or imminent hostilities may only be exercised pursuant to a declaration of war, specific statutory authority, or a national emergency created by an attack on the United States or its forces.⁴

Key provisions are contained in sections 4(a)(1), 4(a)(2), and 4(a)(3), and sections 5(b) and (c). Section 4(a)(1) requires that the President consult with Congress in every possible instance prior to introducing U.S. forces into hostilities or imminent hostilities. This section also mandates that the President report to Congress any

introduction of U.S. forces into hostilities or imminent hostilities within 48 hours of that occurrence. Section 4(a)(2) carries this requirement a step further by providing that the President must report to Congress whenever U.S. forces equipped for combat enter foreign territory. Section 4(a)(3) adds

member states to take “the necessary measures” to prevent arms transfers “from and through their territories or by their nationals, or using their flag vessels or aircraft,” to freeze the assets of Qadhafi and certain other close associates of the regime, and to “facilitate and support the return of humanitarian

measures commensurate to the specific circumstances” to inspect vessels on the high seas suspected of violating the arms embargo imposed on Libya by UNSCR 1970.¹⁷ Despite statements indicating compliance by Libya’s foreign minister, Qadhafi’s forces continued their attacks, and civilian deaths mounted.¹⁸

Although involved in New York in the drafting of UNSCR 1970 through the office of UN Ambassador Susan Rice, the executive branch did not initially take the U.S. lead in actions to curb Libyan violence.¹⁹ It was the Senate through the Committee on Foreign Relations that passed Senate Resolution 85 by unanimous consent on March 1, 2011.²⁰ Resolution 85, shepherded by Senators John Kerry and Richard Lugar, “strongly condemn[ed] the gross and systematic violations of human rights in Libya, including violent attacks on protesters demanding democratic reforms,” “call[ed] on Muammar Qadhafi to desist from further violence,” and “urg[ed] the United Nations Security Council to take such further action as may be necessary to protect civilians in Libya from attack, including the possible imposition of a no-fly zone over Libyan territory.”²¹

Following the passage of UNSCR 1973 on March 17, 2011, which authorized a no-fly zone, President Obama gave the U.S. position on March 18. He stated that for Qadhafi to avoid military intervention, he needed to implement an immediate ceasefire, including ending all attacks on civilians; halt his troops’ advance on Benghazi; pull his troops back from three other cities; and ensure the provision of water, electricity, and gas to all areas.²² President Obama further defined those U.S. national interests impacted by Qadhafi’s continued attacks on his own citizens, stating:

*Left unchecked, we have every reason to believe that [Qadhafi] would commit atrocities against his people. Many thousands could die. A humanitarian crisis would ensue. The entire region could be destabilized, endangering many of our allies and partners. The calls of the Libyan people for help would go unanswered. The Democratic values that we stand for would be overrun. Moreover, the words of the international community would be rendered hollow.*²³

When UNSCR 1973 was observed to have no visible effect (despite an initial

the passage of UNSC Resolution 1970 had no noticeable effect

the requirement that the President report to Congress whenever the United States substantially enlarges forces equipped for combat that are already in a foreign nation. Once an initial report is presented, under 4(a)(1), Congress must authorize the use of forces within 60 days, or 90 in exigent circumstances under section 5(b) of the resolution, or the forces must be withdrawn.⁵

It is the latter requirement, ignored in Libya in May 2011, that this article considers. The current analysis examines the Libya crisis in 2011, reviews U.S. involvement, and places the War Powers requirements during armed interventions in context with other Presidential requirements. It queries whether, through his actions in Libya, President Barack Obama has provided a restructuring of Presidential prerogatives concerning the use of force that will be politically and legally helpful to future chief executives. Equally significant, it questions whether President Obama has redefined the construct of *hostilities* under the resolution if no U.S. ground forces are introduced.

In February 2011, in the midst of world concerns related to regime brutality against civilians in Tunisia and Egypt, later described as the Arab Spring, protests also began in Benghazi in eastern Libya. Citizens there sought governmental reforms and the end of the 40-year reign of Qadhafi.⁶ The response by the Qadhafi government was swift and deadly. Government forces strafed, shelled, and bombed civilian protestors in Benghazi and several other eastern cities, causing many to flee to Egypt.⁷ The United Nations (UN) acted quickly. On February 26, 2011, the UN Security Council (UNSC) unanimously adopted UNSC Resolution (UNSCR) 1970, which “[e]xpress[ed] grave concern at the situation in the Arab Jamahiriya,” “condemn[ed] the violence and use of force against civilians,” and “[d]eplored the gross and systematic violation of human rights in Libya.”⁸ The resolution called upon

agencies and make available humanitarian and related assistance” in Libya.⁹ While important, this resolution did not authorize member states to use military force against Qadhafi’s regime.

The passage of UNSC Resolution 1970 had no noticeable effect. In fact, Qadhafi’s forces escalated the violence against civilians in the east of Libya.¹⁰ That caused the Council of the League of Arab States to call upon the UNSC on March 12, 2011, “to take the necessary measures to impose immediately a no-fly zone on Libyan military aviation” and to “establish safe areas in places exposed to shelling as a precautionary measure that allows the protection of the Libyan people and foreign nationals residing in Libya, while respecting the sovereignty and territorial integrity of neighboring states.”¹¹

When Qadhafi’s forces ignored these resolutions and made plans for an assault on Benghazi on March 17, 2011,¹² the United Nations finally acted in a meaningful way. In UNSCR 1973, the Security Council, by a vote of 10–0,¹³ imposed a no-fly zone over Libya and authorized the use of military force to protect civilians.¹⁴ The UNSC determined that the “situation” in Libya “continues to constitute a threat to international peace and security” and demanded the “immediate establishment of a ceasefire and a complete end to violence and all attacks against, and abuses of civilians.”¹⁵ In paragraph 4, UNSCR 1973 authorized member states, acting unilaterally or through regional organizations, “to take all necessary measures . . . to protect civilians and civilian populated areas under threat of attack in the Libyan Arab Jamahiriya, including Benghazi, while excluding foreign occupation force of any form on any part of Libyan territory.”¹⁶ UNSCR 1973 further authorized member states to enforce “a ban on all [unauthorized] flights in the airspace in the Libyan Arab Jamahiriya in order to help protect civilians” and to take “all mea-

Libyan government statement that it would honor the requested cease-fire), the United States, with the support of coalition partners, launched airstrikes against Qadhafi to enforce UNSCR 1973. The President explained his actions in a March 21, 2011, letter to congressional leadership:

*At approximately 3:00 pm Eastern Daylight Time, on March 19, 2011, at my direction, U.S. military forces commenced operations to assist an international effort authorized by the United Nations Security Council and have undertaken with the support of European allies and Arab partners, to prevent a humanitarian catastrophe and address the threat posed to international peace and security by the crisis in Libya. As part of the multilateral response authorized under [UNSCR 1973], U.S. military forces, under command of the Commander, U.S. Africa Command, began a series of strikes against air defense systems and military airfields for the purposes of preparing a no-fly zone. These strikes will be limited in their nature, duration, and scope. Their purpose is to support an international coalition as it takes all necessary measures to enforce the terms of [UNSCR 1973]. These limited U.S. actions will set the stage for further action by other coalition partners.*²⁴

It was the intent of the United States, he stated, to “seek a rapid, but responsible, transition of operations to coalition, regional, or international organizations that are postured to continue activities as may be necessary to realize the objectives of UN Security Council Resolutions 1970 and 1973.”²⁵

When President Obama ordered U.S. military support for the UN-sanctioned no-fly zone,²⁶ he was triggering the requirements of the War Powers Resolution that was passed over President Nixon’s veto in 1973.²⁷ In the 40 years of its existence, eight Presidents have submitted more than 130 reports pursuant to its requirements.²⁸ In his decision of March 19, 2011, to use military force in Libya, President Obama was making two determinations. First, as reported in the Justice Department’s Office of Legal Counsel (OLC) analysis of April 1, 2011, he concluded that he “had the constitutional authority to direct the use of military force in Libya because he could reasonably determine that such use of force was in the national interest.” Second, he claimed that “[p]rior congressional approval was not constitutionally



U.S. Air Force (Caleb Pience)

Airman checks cargo documents for mission processing at Ramstein Air Base, Germany, during Operation Unified Protector

required to use military force in the limited operations under consideration.”²⁹

This determination to use military force in Libya without seeking prior congressional approval must be examined in the context of the War Powers Resolution,³⁰ a statute intended “to fulfill the intent of the framers of the Constitution of the United States.”³¹ The 1973 statute provides that, in the absence of a declaration of war, the President must report to Congress within 48 hours of taking certain actions, including introduction of U.S. forces into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances.”³²

The heart of the resolution is codified at 50 USC 1544(b), however. While the War Powers Resolution recognizes the President’s unilateral authority to deploy armed forces, it also requires that he must terminate such use of force within 60 days (or 90 days for military necessity) unless Congress extends the deadline, declares war, or “enact[s] a specific authorization.”³³ It is this issue that presents itself most significantly in the Libya involvement.

When President Obama failed to seek congressional approval for the operation on May 19, 2011, 60 days after the initiation

of hostilities, he argued that he was acting consistently with his March 21, 2011, letter report to Congress on the limited nature of U.S. involvement.³⁴ In that letter report, he explained that these actions were part of “the multilateral response authorized under UN Security Council Resolution 1973,” and that “these strikes will be limited in their nature, duration, and scope.”³⁵ He added that “their purpose is to support an international coalition as it takes all necessary measures to enforce the terms of UN Security Council Resolution 1973. These limited U.S. actions will set the stage for further action by other coalition partners.”³⁶

When the House of Representatives called upon President Obama to justify his course in not seeking congressional authorization after 60 days of military involvement, the administration released an OLC memorandum denying a violation of his war powers requirements.³⁷ The memorandum provided the rationale that “war” within the meaning of the Constitution’s “Declare War Clause” does not encompass all military engagements, but only those that are “prolonged and substantial . . . typically involving exposure of U.S. military personnel to significant risk over a substantial period.”³⁸ The memorandum argued that the Libya

intervention “did not implicate the prerogatives of Congress because the U.S. role was limited; unlikely to expose any U.S. persons to attack; and was likely to end soon.”³⁹

The House, led by Speaker John Boehner, was far from satisfied. The House passed a resolution on June 3, 2011, rebuking President Obama for failing to provide Congress with a “compelling rationale” for the military campaign in Libya, but stopped short of demanding that he withdraw U.S. forces from the operation.⁴⁰ This reprimand followed the House’s rejection of a more stringent resolution proposed by Democratic Representative Dennis Kucinich. That resolution would have required President Obama to remove forces from participation in Libya within 15 days.⁴¹ The Democratic-controlled Senate took no action.

The immediate issue raised by the Libyan intervention is whether section 4(a) (1) (consultation with Congress) and section 5(b) (required authorization by Congress) of the War Powers Resolution trigger a time limitation on continued armed involvement unless Congress provides authorization to remain. On the one hand, congressional concurrence strengthens the President’s hand in his foreign policy actions. On the other, failure of the President to seek congressional approval may strengthen his posture in terms of flexibility compared to his options under the resolution.

Recent Presidential reporting provides insights into the interpretation of the resolution.⁴² In Bosnia, for example, President Bill Clinton directed U.S. participation in UN actions without seeking prior congressional approval, at least regarding no-fly zones, enforcement of safe-havens, airlift of humanitarian supplies into Sarajevo, and naval monitoring of sanctions.⁴³ In October 1995, War Powers issues were raised again in the Balkans as President Clinton authorized the assignment of 20,000 combat troops to the force, led by the North Atlantic Treaty Organization (NATO).⁴⁴ The follow-on contingent of 8,500 for the Stabilization Force, again led by NATO, was the subject of a congressional vote in 1998 that continued the authorization and rejected a resolution that would have forced removal of U.S. forces from Herzegovina and Bosnia.⁴⁵

The following year, after President Clinton ordered U.S. forces into Kosovo under NATO leadership,⁴⁶ litigation was filed in Federal District Court in Washing-

ton, DC, challenging his use of the military absent prior congressional authorization. This litigation was dismissed for lack of standing.⁴⁷ Meanwhile, the House on May 6, 1999, defeated an amendment to the fiscal year 1999 Defense Supplemental Appropriations bill that would have prohibited funds for U.S. forces to enter the former Yugoslavia except in time of war.⁴⁸ Congress subsequently passed legislation that approved supplemental appropriations for the Kosovo operation.⁴⁹

Similarly, in Iraq after 1991, three situations raised War Powers issues. The first resulted from Baghdad’s refusal to cease repression of Kurdish and Shi’ite groups.⁵⁰ The second concerned violations of the April 3, 1991, cease-fire accord.⁵¹ The third related to the Iraqi deployment of missiles in the no-fly zone in violation of UNSCR 687 and the threat it posed to coalition aircraft.⁵²

In each instance in Iraq, to include the current conflict, and in the hostilities in Afghanistan, the President has reported to Congress “consistent with” the War Powers Resolution, not “pursuant to” it. This was true in Haiti, Bosnia, Kosovo, and Somalia as well. Congress agreed to disagree with this language but has nevertheless provided authorization and funding under section 5(b) of the resolution. What makes U.S. military involvement in Libya so different is the President’s failure to seek authorization for a *continued* military presence beyond the 60-day requirement.

As controversial as War Powers issues have been, President Obama is the first Commander in Chief to determine that bombing and blockading an adversary is not an engagement in “hostilities.” Section 2(a) of the War Powers Resolution states:

2(a). It is the purpose of the joint resolution to fulfill the intent of the framers of the Constitution of the United States and insure that the collective judgment of both the Congress and the President will apply to the introduction of the United States armed forces into hostilities, or into situations where imminent involvement in hostilities is clearly indicated by the circumstances, and to the continued use of such forces in hostilities or in such situation.

When military action reached day 60 on May 19, 2011, President Obama showed no inclination to seek the approval of Congress for the continuation of the Libya

mission. While it is true that *hostilities* are not defined in the War Powers Resolution, the United States had ground forces in Libya, and U.S. forces were enforcing a no-fly zone, conducting bombing raids, firing cruise missiles, directing lethal drone strikes, and maintaining a tight naval blockade. These are all acts of war and constitute involvement in hostilities in any nation’s lexicon. Moreover, while Washington has now taken on a supporting role under NATO leadership, U.S. military leaders lead NATO, and the War Powers Resolution clearly states that the “introduction of U.S. forces” applies in these circumstances.⁵³ U.S. participation in the NATO-led effort has included drone attacks, aerial refueling of allied combat aircraft, electronic jamming, search and rescue missions, and other assistance to the “kinetic operations” defined by President Obama to be outside the definition of “hostilities.”

One of the unfortunate realities about being a superpower, and the United States is arguably the only one at present, is that it possesses capabilities and resources not available elsewhere. The United States, as Professor Robert Chesney points out, “has close air support and quick response capabilities—including, but not limited to, armed drones—that the allies could not replicate, and without which the [Libya] operation might fail.”⁵⁴ More interesting, though, is the obvious result of the new White House definition of *hostilities* to embrace intensity, frequency, and risk to U.S. personnel. President Obama is likely creating a dangerous precedent that could severely limit congressional prerogatives in the War Powers process and frustrate the framers’ intent.

Current legal and policy planning for future operations could also be greatly altered by the new definition of hostilities.⁵⁵ If a serving or future President can argue that a lethal but singular strike on the nuclear weapons capability of a potential adversary is justified without congressional notification or approval, neither the War Powers statute nor constitutional parity between branches of government would any longer have relevance.

Of concern as well is the White House view that senior U.S. military commanders assigned to NATO or a similar UN structure are no longer subject to the constraints of section 8(c) of the War Powers Resolution.⁵⁶ This could provide a President absolute

license to support these operations militarily while avoiding the strictures of the resolution. Equally troubling for the Airmen flying bombing missions, Sailors enforcing a naval blockade, or U.S. personnel maintaining a no-fly zone, changing the definition will in no way diminish the risks they are exposed to in executing their missions. **JFQ**

NOTES

¹ War Powers Resolution, Pub. L. 93-148 (November 7, 1973).

² *Ibid.*, sec. 5.

³ See generally, James P. Terry, "The President as Commander-in-Chief," *Ave Maria Law Review* 7, no. 2 (Spring 2009).

⁴ War Powers Resolution.

⁵ *Ibid.*, sec. 5.

⁶ Muammar Qadhafi of Sirte, Libya, had ruled the country since taking power in a 1969 tribal coup.

⁷ See "Authority to Use Military Force in Libya," Office of Legal Counsel Memorandum Opinion for the Attorney General, U.S. Department of Justice, April 1, 2011.

⁸ United Nations Security Council Resolution (UNSCR) 1970, UN Doc. S/Res/1970 (February 26, 2011).

⁹ *Ibid.*, paras. 9, 17, 26.

¹⁰ See, for example, African Union (AU) Communiqué of the 265th Meeting of the Peace and Security Council, PSC/PR/COMM.2 (CCLXV), March 10, 2011, describing the "prevailing situation in Libya as posing a serious threat to peace and security in that country and region as a whole and reiterating AU's strong and unequivocal condemnation of the indiscriminate use of force and lethal weapons."

¹¹ League of Arab States, "The Outcome of the Council of the League of Arab States Meeting at the Ministerial Level in its Extraordinary Session on the Implication of the Current Events in Libya and the Arab Position," Res. No. 7360, para. 1, March 12, 2011.

¹² Qadhafi, in a March 17 radio address to his supporters, pledged that his forces would begin an assault on Benghazi that night and "show no mercy and no pity" to those who would not give up resistance. He stated, "We will come house by house, room by room. It's over. The issue has been decided." See Dan Bilefsky and Mark Landler, "Military Action Against Qadhafi Is Backed by UN," *The New York Times*, March 18, 2011, A1.

¹³ Five UNSC members abstained.

¹⁴ See UNSCR 1973, UN Doc. S/RES/1973 (March 17, 2011).

¹⁵ *Ibid.*

¹⁶ *Ibid.*, para. 4.

¹⁷ *Ibid.*, paras. 6–8, 13.

¹⁸ The White House, Office of the Press Secretary, press release, "Letter from the President Regarding Commencement of Operations in Libya: Text of Letter from President Obama to Speaker Boehner and the President Pro Tempore of the Senate," March 21, 2011, available at <www.whitehouse.gov/the-press-office-/2011/03/21/letter-president-regarding-commencement-operations-libya>.

¹⁹ This is somewhat surprising in light of Qadhafi's well-documented state-sponsored terrorism against U.S. citizens in 1985–1986. See, for example, James P. Terry, "An Appraisal of Lawful Military Response to State-Sponsored Terrorism," *Naval War College Review* (May/June 1986).

²⁰ S. Res. 85, 112th Cong. (as passed by the Senate, March 1, 2011).

²¹ *Ibid.*, paras 2, 3, and 7.

²² The White House, Office of the Press Secretary, press release, "Remarks by the President on the Situation in Libya," March 18, 2011, available at <www.whitehouse.gov/the-press-office/2011/03/18/remarks-president-situation-libya>.

²³ *Ibid.*

²⁴ "Letter from the President."

²⁵ *Ibid.*

²⁶ See UNSCR 1973, UN Doc. S/RES/1973 (March 17, 2011).

²⁷ War Powers Resolution.

²⁸ See generally, Terry, "The President as Commander in Chief."

²⁹ "Authority to Use Military Force in Libya."

³⁰ War Powers Resolution, sec. 5.

³¹ See 50 U.S.C. 1541(a).

³² *Ibid.*, sec. 1543(a).

³³ *Ibid.*, sec. 1544(b).

³⁴ "Letter from the President."

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ "Authority to Use Military Force in Libya."

³⁸ *Ibid.*

³⁹ *Ibid.*

⁴⁰ See David A. Fahrenthold, "House Reprimands Obama Over Military Effort in Libya," *The Washington Post*, June 3, 2011, A7.

⁴¹ *Ibid.*

⁴² President Gerald Ford submitted 4 reports; President Jimmy Carter 1; President Ronald Reagan 14; President George H.W. Bush 7; President Bill Clinton 60; President George W. Bush 39; and President Barack Obama 5. See Richard F. Grimmet, *The War Powers Resolution After 36 Years*, R41199 (Washington, DC: Congressional Research Service, 2009).

⁴³ *Ibid.*, 5.

⁴⁴ See generally, James P. Terry, "UN Peacekeeping and Military Reality," *Brown Journal of World Affairs* 3, no. 1 (Winter/Spring 1996).

⁴⁵ H. Con. Res. 227, March 18, 1998. Resolution 227 would have directed the President, pursuant to Section 5(c) of the War Powers

Resolution, to remove all forces from Bosnia and Herzegovina.

⁴⁶ See James P. Terry, "The Emerging Role of NATO in UN Peace Enforcement Operations," *International Law Studies* 72 (1998), 297.

⁴⁷ See *Campbell v. Clinton*, 52 F. Supp. 2nd 34 (1999). Judge Paul Friedman ruled on June 8, 1999, that Representative Tom Campbell (R-CA) and others lacked standing to bring the suit. The decision was affirmed by the DC Circuit Court of Appeals, 203 F. 3rd 19 (DC Cir. 2000), and *certiori* was denied by the Supreme Court, 531 U.S. 815 (2000).

⁴⁸ HR 1664, Fiscal Year (FY) 1999, Defense Supplemental Appropriations 1999.

⁴⁹ HR 1141, FY99, Emergency Supplemental Appropriations, May 20, 1999.

⁵⁰ See UNSCR 688, April 5, 1991. The resolution condemned the repression of the Iraqi civilian population and appealed for contributions for humanitarian relief.

⁵¹ UNSCR 687, April 3, 1991.

⁵² Public Law 102-1 (1991) authorized the President to use U.S. Armed Forces pursuant to the cease-fire to achieve implementation of previous Security Council resolutions. UNSC Resolution 687 was adopted after this. On August 2, 1991, the Senate adopted an amendment to the Defense Authorization bill for FY92 supporting the use of all necessary means to achieve the goals of Resolution 687.

⁵³ Admiral James G. Stavridis, USN (Ret.), formerly commanded Supreme Allied Command Europe and the military arm of the North Atlantic Treaty Organization. Sec. 8(c) of the War Powers Resolution states, "For purposes of this joint resolution, the term 'introduction of United States Armed Forces' includes the assignment of a member of such armed forces to command, coordinate, participate in the movement of, or accompany the regular or irregular military forces of any foreign country or government when such military forces are engaged, or there exists an imminent threat that such forces will become engaged, in hostilities."

⁵⁴ Robert Chesney, *Primer on the Libya War Powers Resolution Compliance Debate* (Washington, DC: Brookings, July 19, 2011), available at <www.brookings.edu/opinions/2011/0617_war_powers_chesney.aspx?p=1>.

⁵⁵ Jeh Johnson (formerly) at the Defense Department and Caroline Krass at the Justice Department have advised the White House, although they disagree with the new definition of *hostilities*, fashioned by Harold Koh at the State Department and the White House Counsel's Office, for purposes of the War Powers Resolution.

⁵⁶ Chesney.

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Best Forum Article
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Photo: Joey Saich

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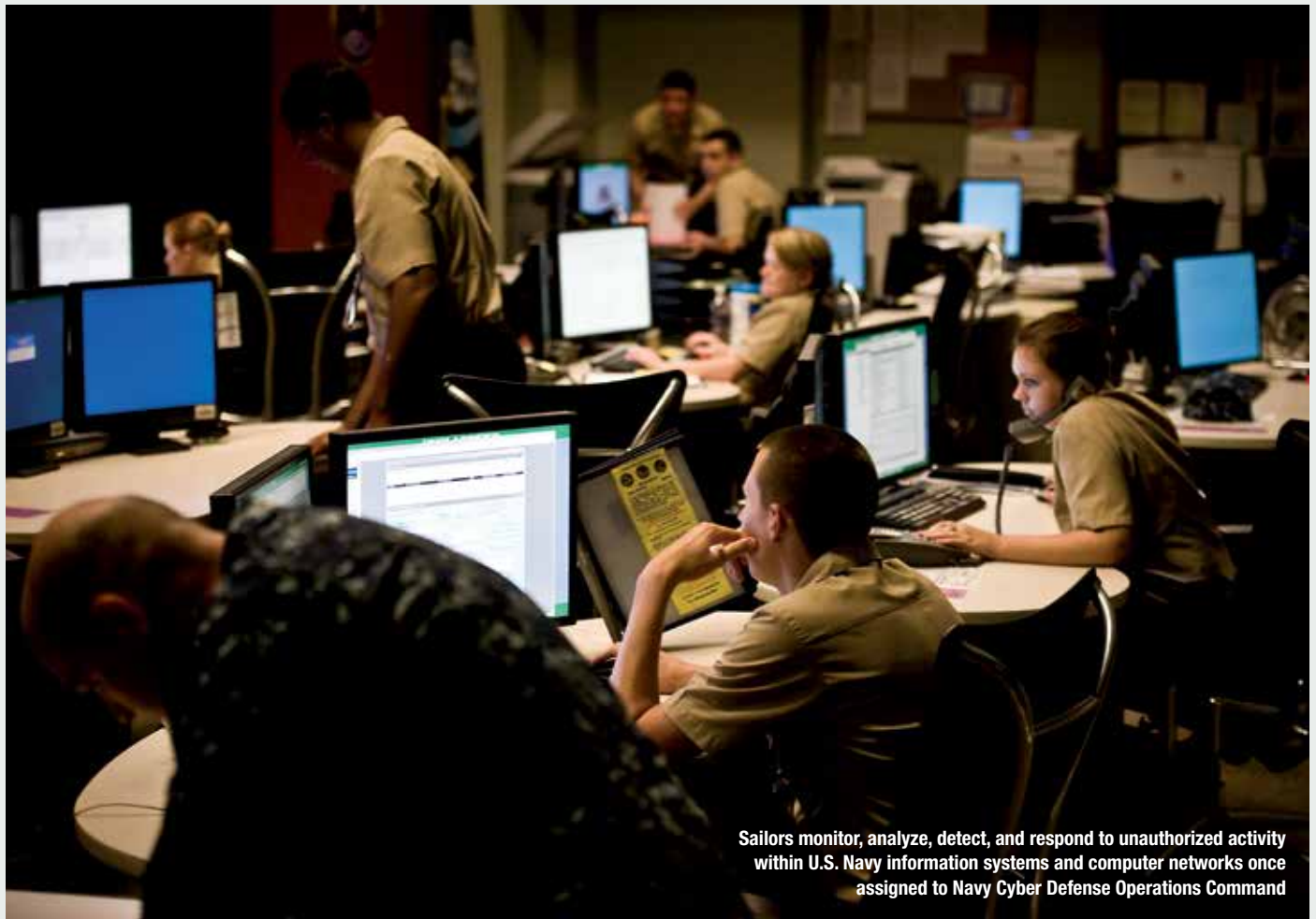
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Core Questions for Cyber Attack Guidance

By JONATHAN C. RICE

Colonel Jonathan C. Rice, USAF, wrote this essay while a student at the U.S. Army War College. It won the 2013 Secretary of Defense National Security Essay Competition.

Despite a decade of prolific writing, many questions about cyber power, cyber war, and cyber attack remain unresolved.

In particular, national governments, including the U.S. Government, do not yet have well-formed cyber attack policies and strategies or the frameworks around which to build them.¹ Furthermore, accelerating changes in power distribution, cyber technology, and other dynamics of the strategic environment exacerbate the dearth of open, distinct, and explicit cyber attack guidance. If such well-defined guidance did exist, what questions would one reasonably expect it to answer? On what

intellectual foundation should a state build its cyber attack policy and strategy? If an outsider wanted to understand an actor's strategic guidance, what clues would he look for?

Answers to these questions could—and this article argues *should*—reside in four foundational elements: contextual views, the cyber attack spectrum, balance of focus, and appropriate circumstances. How an actor approaches each of these elements fundamentally shapes the myriad details of subsequent policy and strategy. One could use a framework based on these elements as a model to think about and discuss cyber attack in a structured way, a basis for forming one's

own policy and strategy, or a tool for assessing and understanding the strategic guidance of another actor. This article first presents such a framework and then uses it to make recommendations for U.S. national guidance.²

Framework

The proposed cyber attack framework consists of the following four foundational elements:

- **Context:** To what extent does cyber attack provide a new way to do things along two dimensions—type of activities and view of the strategic environment?
- **Spectrum:** How broadly and in what arrangement does one consider the spectrum of cyber attack possibilities?
- **Focus:** What is the optimal balance of focus along the continuum of cyber attack as an enabling function, an independent capability, and a strategic attack?
- **Circumstances:** What are the appropriate circumstances—legal, ethical, and prudential—in which to conduct cyber attacks?

The clarity with which an actor addresses these four elements undergirds well-defined, coherent guidance. Clear conceptions do not guarantee effective policy, but they do facilitate it. Ambiguous answers will likely result in underdeveloped, inconsistent, or ineffective guidance.³

Contextual View. The first and most significant element addresses an actor's contextual view of cyber attack in terms of the novelty of the types of activities conducted and the strategic environment in which these occur. In its simplest expression, a cyber attack is a new way to conduct an attack; cyber provides a new set of tools to accomplish familiar tasks. This is significant. Israel's reported cyber attack against air defenses during a 2007 strike on a Syrian nuclear weapons facility provides an example. During the strike, Syrian radar screens did not show the incoming Israeli aircraft because an Israeli cyber attack had taken control of the systems, enabling the fighters to arrive undetected.⁴ Other methods have been used to negate air defenses (for example, stealth aircraft and radar jamming); however, cyber attack allowed use of nonstealthy aircraft while concealing not only specific aircraft locations, but also that there was an imminent air attack at all. Cyber attack provided clear

advantages, but nonetheless it performed a familiar task.

However, cyber attack also offers revolutionary capabilities. The explosion of computing power, the increasing interconnectedness of computer operations, and the integration of computers and associated networks into so many functions of modern society have led to the emergence of cyberspace as a domain unto itself.⁵ Within this realm, actors can conduct activities or achieve effects not otherwise attainable.⁶ This first contextual dimension captures the extent to which activities or effects represent a new kind in and of themselves, or to which they are practicable with a notably greater scope, intensity, frequency, or magnitude than what is achievable through other means.

The second dimension of the contextual view consists of the novelty and dynamic nature of the strategic environment. Four changes have occurred over the last century that collectively demand fundamentally different ways of thinking. First, the globe contains less unclaimed or internationally contested space. The end of imperial expansion, establishment of states covering the globe, development of international law, and creation of institutions to help resolve disputes have significantly reduced the amount of such territory. Hotly contested border areas, nations without states, disgruntled people within states, and undergoverned areas represent the territorial conditions and the associated nonstate actors that are most likely to produce conflict.

Second, globalization has accelerated at an exponential pace over the last few decades. Technological developments and the end of the Cold War have significantly increased global interconnectedness, especially in the international movement of information, monetary value, people, and cargo. Cyberspace has both contributed to and resulted from globalization.

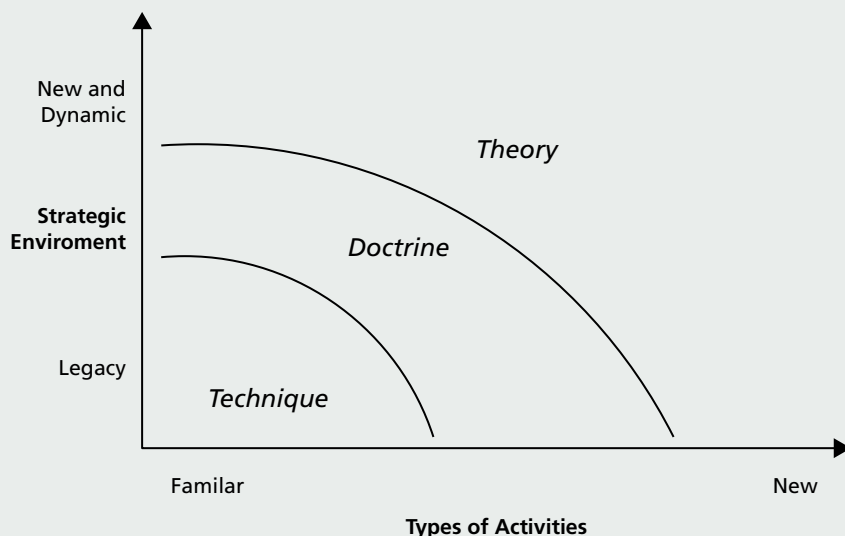
Third, a number of influential international organizations have arisen. Over time, their organizational capabilities have matured, their roles have expanded, their legitimacy has grown, and their influence over international and national activities has increased. Such entities provide alternative forums for the communication, cooperation, and conflict resolution that have increasingly changed the dynamics of international interaction.

Fourth, the ways and means of violent conflict have changed radically. The advent of nuclear weapons stands out as the most significant development. Advancements in communications, precision-guided munitions, and intelligence, surveillance, and reconnaissance have changed the character of war.⁷ Arms proliferation including missiles and weapons of mass destruction have placed great power in more hands. Finally, the information age has introduced ubiquitous media reporting and cyber attack.⁸

Collectively, these four changes in the environment have dispersed power in the international order and altered the rules of the game for conflict resolution. Since the Peace of Westphalia in 1648, nation-states have served as the primary actors in the international arena. While they will remain the most important actors for some time, the paradigm for power distribution is changing. Large states with great resources and robust militaries now share a much greater portion of power with smaller states and nonstate actors, which can now create, control, and transact information, monetary value, and weaponry in significant ways and amounts. They often enjoy an advantage over larger states in access, agility, and anonymity. Furthermore, the transnational nature of many activities, ambiguity of certain actor identities, and perceived capabilities and legitimacy of nonstate actors erode the notion of inviolable territorial integrity and political sovereignty.⁹

Simultaneously, international norms of behavior have begun to change. Paradoxically, as the acceptability of using force to resolve state-versus-state conflict diminishes, the impetus for able states to intervene elsewhere for humanitarian causes increases. The transnational nature of certain threats such as drug-trafficking and international violent extremism complicates traditional methods of national defense. The interconnectedness of states and nonstate actors creates both opportunities and vulnerabilities that are not adequately addressed in existing national or international law. Nonstate actors enjoy increasing amounts of legitimacy, capability, and capacity to conduct activities previously reserved to states.¹⁰ A greater number and variety of international actors may now influence issues they have stakes in. Finally, due to increased interconnectedness, events in one place often have more extensive second- and third-order effects on a greater variety of entities and across a larger span of the globe. The

Figure 1. Contextual View of Cyber Attack and Associated Approaches



rise of nonstate actors, the interconnectedness of activities, and the ambiguity of where cyber attack fits within existing norms contorts international rules of the game.¹¹

Consequently, cyberspace—which is both a cause and product of this new and dynamic environment—continues to grow as a medium for international cooperation and conflict. Cyber attack not only offers the opportunity to do new things, but it also does so in a notably different and dynamic strategic environment that demands innovative ways of thinking. The degree to which actors share these views and behave accordingly affects how they approach cyber attack issues (see figure 1). A cyber attack intended to execute a familiar task in a legacy environment is primarily a technical problem to solve. It calls for a new technique. A cyber attack reflecting newer types of activities or occurring in a new strategic environment requires not only technical innovations, but also new principles to guide operations—that is, new doctrine. Actors who believe the emergence of the cyber domain creates fundamentally new possibilities, especially in light of a vastly different and dynamic strategic environment, operate in boundary conditions that require pioneering ways to think about the problem—or new theory.¹² The steps from technique to doctrine to theory reflect nonlinear leaps in approach.¹³ The contextual view an actor takes drives its approach to the remaining three elements of the framework and, ultimately, the character of resulting policy and strategy.

Spectrum of Cyber Attacks. The second element of the framework involves the extent to and ways in which an actor distinguishes between different types of cyber attacks. For example, some place various cyber attacks into the categories of war, terrorism, crime, espionage, operational preparation of the environment, and so forth.¹⁴ Others limit discussion of cyber attacks to conflicts involving only computer network attacks or state actors.¹⁵ Still others categorize cyber attacks according to their technical characteristics, lumping them into groups such as worms, viruses, and denial-of-service attacks.¹⁶ These parameters provide useful frameworks for analysis, but they entail various biases or limitations. Each arranges cyber attacks by one or more of the following factors: attacker, target, victim, activity, effect, and intent. An assessment of these six factors provides insight into how broadly and in what ways various actors perceive the spectrum of cyber attacks.¹⁷

The first factor addresses the identity of the *attacker*, who could be an individual, multinational corporation, organized armed group such as a terrorist or insurgent entity, transnational criminal organization, traditional state, or international governmental organization. A mix of entities could work as sponsors, proxies, or partners, and any of the above could hire cyber attack mercenaries.¹⁸

A virtual or physical *target*, the second factor, constitutes the direct object of the actions. Objects can include information itself; digital, electronic, and mechanical systems; physical items; and the people and

processes associated with any of these. Additionally, targets could involve governmental, military, corporate, private civilian, critical infrastructure, informational, financial, and intellectual property objects.¹⁹

The third factor, the *victim*, is the indirect object of the attacks or the owner, operator, possessor, or beneficiary of the target. Victims can include all the same types of actors as attackers. Additionally, attackers might direct strikes at particular societies, populations, or subsets. In some cases, attackers desire to gain some benefit for themselves without concern for the victim's identity per se. An attack could have multiple victims.

The fourth factor, *activity*, addresses the action that actually constitutes a cyber attack. Actions that involve both a cyber input and output include access (for example, piracy, theft, espionage); manipulation to add, delete, or change electronic data; control of computer processes; and denial of access, manipulation, or control by the victim. Actions could also involve cyber inputs with physical outputs such as malware that physically damages electronic devices, manipulates supervisory control and data acquisition (SCADA) equipment, or controls automated, robotic, and weapons systems. Finally, actions could involve noncyber (often kinetic) input with cyber output such as severing electric power to physical components of cyberspace, physical damage to those components, and an electromagnetic pulse that erases digital data or renders computing devices nonfunctional.²⁰ The activity may involve many actions in sequence or simultaneously.

Activities—whether cyber-cyber, cyber-physical, or noncyber-cyber—produce effects, the fifth factor. *Effect* describes not just the immediate outcome of an attack, but also the associated intensity, frequency, scope, magnitude, duration, and criticality.²¹ Notable thresholds include whether the attacker actually changed the target or merely observed and accessed it, activated malware or only emplaced it, achieved virtual or physical outcomes, or caused physical damage including human injury or death.²² This factor also encompasses second- and third-order effects²³ as well as unintended consequences.²⁴ The full extent of effects may be difficult to anticipate before an attack and measure afterward. Causal linkages and degrees of separation between action and result may be ambiguous.²⁵ Moreover, the nature of the attack and of the target, along with the victim's response,

may alter effects and a system's resiliency to them.

Finally, *intent* is the underlying purpose of the attacker in conducting a cyber attack. The attacker may desire to drive changes to political views, actions, or outcomes. Alternatively, he may want to gain an economic benefit or deny one to the victim. The attacker may hope to deny, degrade, or destroy a military or other type of capability. Or he may just want to *hurt* the victim or cause general disruption.²⁶ Intent reflects the motivation.²⁷

Collectively, the nature of the attacker, target, victim, activity, effect, and intent characterize where a particular cyber attack fits along the spectrum of possibilities. Different combinations of these factors may produce qualitatively different kinds of cyber attacks. Certain types of attack may be more effective in specific circumstances. They present different threats and may require different postures for deterrence and responses.²⁸ Either an attacker or a potential victim will necessarily focus its policy, strategy, and capabilities on an arranged subset of this spectrum. Understanding how these actors bound and sort the spectrum reveals how they perceive cyber attack, both as an option and as a threat.²⁹ Among other things, how an actor scopes and arranges the spectrum drives the prioritization and relationship of a specific cyber attack relative to other kinds of cyber attack. The next key element addresses the primacy and relationship between cyber attack and other types of actions.

Balance of Focus. The third element of the framework entails an actor's balance of focus on cyber attack as an enabling function, an independent capability, and a strategic attack. As an enabling function, cyber attack plays a supporting role to some other form of action or operation. That is not to say that this role is necessarily unimportant; cyber attack may be the critical enabler for successful achievement of an actor's objectives. Nonetheless, it is insufficient by itself.³⁰ The 2007 Israeli cyber attack against Syrian air defenses was such a case.

Cyber attacks can also take on identities and purposes of their own, whether they are conducted exclusively or in conjunction with other types of operations. For example, disruption of an adversary's command, control, and communications capabilities may facilitate other offensive operations, but it has an independent quality. As independent capabilities, cyber attacks could constitute single

or small-scale events with narrow objectives, focused or widespread covert operations, overt military-like campaigns between belligerents, or persistent actions over extended periods to attrit an adversary's capability or will to resist.³¹

Cyber attacks intended to achieve an attacker's main objectives by striking directly at an adversary's centers of gravity constitute strategic attacks.³² These could take several forms. First, an attacker could use a cyber attack to detrimentally affect key infrastructure, such as shutting down telecommunications or the electric power grid via attacks on SCADA systems. The Stuxnet attack on Iran's nuclear weapons program—notably, against a closed system not connected to the Internet—provides an example.³³ Second, an attacker could disrupt critical civilian or military functions. Third, an attacker could destroy, disrupt, or deny use of a significant portion of cyberspace itself with major second-order effects on other critical functions. For example, Russia's 2008 denial-of-service attacks against Georgia's Internet infrastructure for 19 days degraded the target country's military command and control, stopped all electronic transactions of the National Bank for 10 days, and disrupted reporting of current events outside the country.³⁴ Vulnerability to such strategic attacks varies widely by actor depending largely on the interconnectedness of critical infrastructure such as electric power, financial institutions, and telecommunications.

The balance of focus among these roles carries significant implications. Allocation of time, money, and expertise to develop and conduct various kinds of cyber attack reflects an actor's beliefs about desirable objectives, the direct and indirect effects possible, the most efficient use of available resources, and the efficacy of cyber attack versus other suitable instruments. The actor's contextual views and assessment of the cyber attack spectrum will largely shape these beliefs. For example, some contend that cyber attack has "broken the evolutionary continuity of the character of war"³⁵ and could independently achieve catastrophic strategic-level damage to critical infrastructure and disruption to societies.³⁶ More skeptical analysts conclude that enduring and widespread catastrophic damage remains improbable in the first place, and—even if it did occur—it would be unlikely to achieve the underlying strategic goals of the attacker.³⁷ Others think that strategic attacks

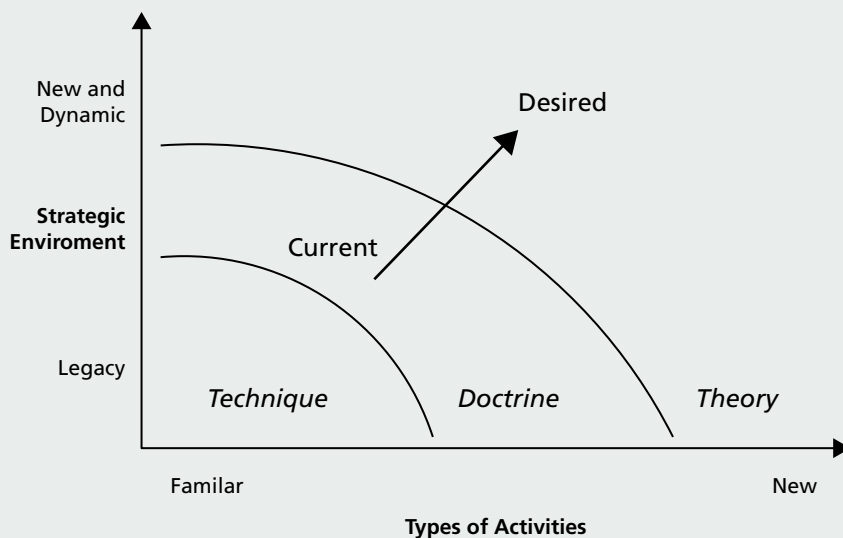
are possible and even likely; however, their effects, while significant, may not be catastrophic.³⁸ An actor's views on the efficacy of enabling, independent, and strategic roles for cyber attack drive its allocation of resources, organizational alignments, development of theory and doctrine, and ultimately the associated policy and strategy. These views also shape the actor's determination of when to conduct cyber attack.

Appropriate Circumstances. The fourth element addresses the appropriate circumstances in which to conduct cyber attack. An actor must assess the opportunities and associated risks as well as the costs and benefits. As circumstances vary, so will assessments of suitability and acceptability as viewed through the lenses of law, ethics, and prudence.

Through the lens of law, two fundamental debates are under way that are interwoven and sometimes confused. The first takes a descriptive and explanatory approach to determine the legality of various cyber attacks under existing international law.³⁹ The second takes a normative approach to establish when and which cyber attacks *should* be lawful. Each of the six factors of the cyber attack spectrum plays a pivotal role in both debates, for delineations between legal and illegal often hinge on the particulars of one or more of those factors.⁴⁰ Additionally, difficulties with clear attribution complicate these judgments. Absent strong cyber attack precedent, it remains unclear how various actors will apply the principles and how such norms will evolve over time.⁴¹ These issues become further convoluted when they involve nonstate actors. While certain components of international law address actions by these groups, the traditional law of armed conflict (LOAC) focuses on state-on-state engagement.⁴² It seems plausible that some attackers will exploit this ambiguity to conduct cyber attacks in a manner they perceive to reside just below the thresholds of LOAC.⁴³

Given the ambiguities of interpreting and applying international law, ethical norms become even more relevant. For example, even if an *armed conflict* clearly exists and a cyber attack clearly rises to the level of *use of force* or *armed attack*, actors will still make judgments in applying principles such as military necessity, proportionality, discrimination, and minimizing unnecessary human suffering in the context of cyber attacks and their associated effects.⁴⁴ Ethical norms based on religious values, ethnicities, local traditions, and other

Figure 2. Current and Desired U.S. Contextual Views of Cyber Attack



factors will vary across international actors.⁴⁵ Furthermore, regardless of how clearly or consistently actors apply LOAC, the spectrum of cyber attacks includes a huge range of activity. Much (if not most) of this activity will never rise to the level of armed conflict. While other laws including the Convention on Cyber-crime, human rights law, and various national laws may apply, evolving international norms will guide how expansive or restrictive cyber attack standards become.⁴⁶ Over time, these norms will form the basis of new international rules of the game, interpretations of existing law, and creation of new law, but this process takes time.⁴⁷

In addition to legal and ethical considerations, actors will also judge whether cyber attack in general and a specific kind in particular seems prudent. Indeed, actors may deem a cyber attack illegal and unethical and still judge it worth conducting. A number of factors may make cyber attack an appealing option. It may provide an asymmetric capability against an otherwise superior adversary. Traditional warfare is costly in treasure, lives, and political capital.⁴⁸ The low cost of entry for cyber attack allows smaller, poorer states as well as nonstate actors a seat at the table. The complexity and costs of certain high-end cyber attack operations restricts this portion of the spectrum to wealthy actors with robust capabilities; however, others can access a significant portion of the spectrum with more moderate costs and technical requirements.⁴⁹ Additionally, anonymity seems useful and achievable via cyber attack.⁵⁰ Finally, cyber

attack may offer the best—and perhaps only—option for achieving certain effects.

Correspondingly, a variety of factors might dissuade an actor. Cyber attack might not offer a viable solution with the desired effect and reliability. Such activity might prove politically difficult with either internal or external audiences. Cyber attack might pose unacceptable harmful consequences to others or oneself.⁵¹ An attacker might not want to bear the associated risk of retribution or escalation. Finally, the would-be attacker might not possess the technical capability to reliably plan or execute the desired attack. Evaluation of opportunities and risks as well as the benefits and costs would vary across actors and circumstances. However, how a particular actor perceives, weighs, and judges legal, ethical, and prudential considerations would guide its determination of the appropriate circumstances in which to conduct cyber attacks.

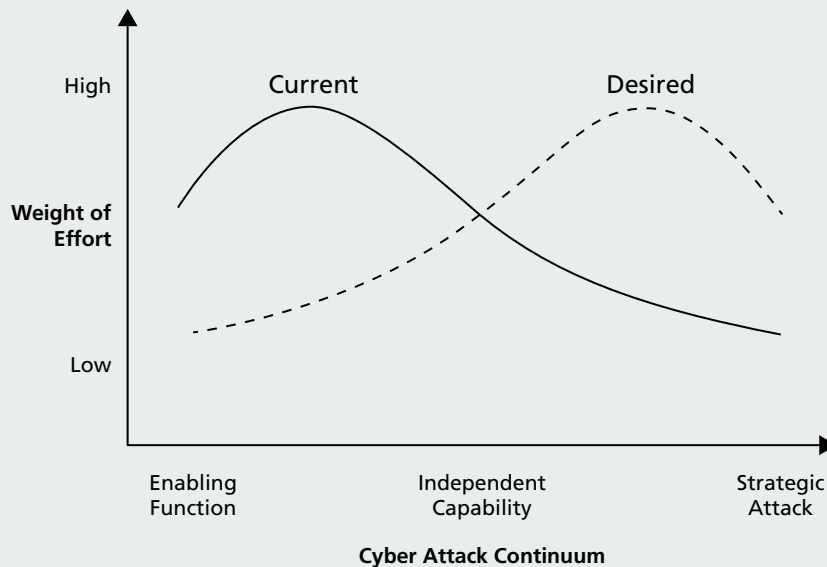
Implications for the United States

This framework provides a useful tool for U.S. policymakers and strategists. Various studies and reports have suggested the United States needs national debate and a clear cyber attack policy.⁵² The elements of this framework provide the necessary foundation for conducting such discourse and formulating national guidance. How policymakers and strategists address these four core areas should drive resolution of the many more detailed operational, technical, and organizational issues that follow from them.

Context. To the extent that prevailing U.S. thinking on cyber attack has coalesced at all, it falls largely within the middle range of both the activity type and strategic environment dimensions of context. At least in public discourse, it focuses largely on cyber attacks to execute relatively familiar tasks and on certain elements of cyber security. It also tends to use the language of a legacy strategic environment dominated by state sovereignty, territorial integrity, physical interaction, and clearer distinctions between armed conflict, crime, espionage, and diplomacy. Significant pioneering effort is still needed to merge intellectual work on the new and dynamic strategic environment with the revolutionary aspects of cyber attack activities.⁵³ This territory offers the greatest promise of meaningful cyber attack theory that should form the basis of U.S. policy and strategy going forward (see figure 2).⁵⁴ Technology alone—especially while rapidly changing—cannot provide this foundation.⁵⁵ Theory and technology should jointly drive doctrine and the national guidance under which it is employed.⁵⁶

Spectrum. Such theory would almost certainly steer policymakers and strategists to a wide-spectrum view of cyber attack. Distinctions between categories of cyber attacks such as war, terrorism, crime, and espionage—and the actors who conduct them—continue to blur.⁵⁷ Moreover, the actions required to conduct or respond to cyber attack would increasingly involve more coordinated participation by military, civilian government, private sector, and international entities.⁵⁸ Consequently, U.S. policy and strategy should address a broad range of cyber attacks including cyber-to-cyber, noncyber-to-cyber, and cyber-to-physical. The last category will gain increasing importance as “critical mass” is achieved in automation, robotics, and machine learning.⁵⁹ Still, some threshold is necessary to focus limited resources. For this purpose, effect—including indirect and cumulative aspects—should play an important role.

Balance. Similarly, the United States should consciously determine the balance of its efforts along the enabling, independent, and strategic attack continuum. The weight of effort currently favors enabling functions. This disposition reflects the underdeveloped nature of cyber attack theory and proclivity to operate within established realms of activity. However, the United States would benefit more from a distribution of effort weighted

Figure 3. Current and Desired U.S. Balance of Focus

toward the strategic attack end of the continuum (see figure 3). First, such an orientation induces deeper thinking for newer types of activities where the United States stands to gain the most and enemies could pose the greatest threat. Second, intentional focus on the strategic end has cascading benefits on the enabling end, where legacy organizational inertia will continue to make advances regardless; however, the reverse is much less likely. Third, cyber attack can play a niche role as a form of coercive diplomacy somewhere short of armed attack. It may also prove itself as an asymmetric advantage against nonstate actors who are less vulnerable to kinetic strikes but become more dependent on cyberspace. Both roles are more likely found on the independent and strategic attack end. Fourth, given the dynamic nature of cyber attack technology, the United States should adopt a future-oriented perspective. It is better to be constrained by technology than ideas. Finally, policymakers and strategists should devote concerted effort on the linkage between the direct effects of cyber attack and the desired political, security, and economic outcomes—a key element of more mature theory.⁶⁰

Circumstances. Determining the appropriate circumstances in which to conduct cyber attack may prove elusive, but it could also produce the most direct consequences. U.S. policy should preserve the stability of international laws and norms regarding armed conflict. However, because both the strategic environment and the activities afforded by

technology—both bases for existing laws and norms—have changed in fundamental ways, some recalibration is required. As previously argued, the rules of the game are changing. How large a role will the United States play in what they change to?

Superpower status, allure as a target, and cyber attack capability make the United States uniquely positioned to lead that recalibration. Positions taken (or not taken) and actions conducted (or not conducted) could set precedents and sow norms with far-reaching consequences.⁶¹ Assuming a strong alignment between what is beneficial for the United States and for the rest of the world in terms of international security and stability, Washington should take a normative approach. That is, policymakers should first determine what international norms *ought* to exist vis-à-vis cyber attack. Then they should emplace policies to build international consensus, set precedent, interpret relevant existing international law, develop norms of behavior, and draft new agreements (treaty law) as appropriate to institutionalize those normative determinations. In this way, the United States can lead the modernization of international law in a way that accounts for the fundamental contextual changes of cyber attack.⁶²

Washington should maintain stability and order by limiting cyber attacks while also preserving options to conduct such attacks in defense of its interests. This duality exists for other forms of statecraft, especially armed conflict, but it does beg the question of when

it makes sense to conduct, or at least threaten, cyber attack. Assuming that a particular cyber attack is possible, U.S. policymakers and strategists should evaluate its suitability and acceptability. Suitability addresses causal linkages between a given cyber attack and desired outcomes. In other words, using the logic of cyber attack, one should explain how the particular attack results not only in the direct effects but also in the desired modification to environmental conditions or adversarial behavior.⁶³ To inform such evaluations, especially in the absence of sufficient empirical case studies, one needs sound theory that addresses how to impose, defend, coerce, deny, compel, and deter vis-à-vis cyber attack.⁶⁴

If cyber attack offers a suitable option, one should assess its acceptability. Acceptability addresses the conditions created by a cyber attack. Will others perceive the attack as violent? Does it intentionally (or likely) result in human injury or death, other human suffering, physical damage or destruction, or loss of critical data? What collateral damage may result? Are these effects irreversible? What is the current state of affairs and status of conflict, does traditional armed conflict already exist, and to what extent does the cyber attack risk escalation? Does the attack involve highly sensitive areas, such as the international finance system or weapons of mass destruction, which could undermine trust, confidence, and reliability; set far-reaching negative precedent; create uncontrollable systemic repercussions; or produce otherwise taboo effects?⁶⁵ Most fundamentally, does the attack contribute to or detract from long-term international security and stability as well as the norms that promote them? Given answers to these and similar questions, is the cyber attack acceptable to the United States? To the international community?

These questions address normative legal, ethical, and prudential aspects of cyber attack that should guide U.S. policy and strategy, but answering them is difficult. Well-developed cyber policy and strategy, as with nuclear issues in the last century, will evolve over time; however, it should begin with a clear idea of *what* the United States is trying to achieve and *how* that might come to pass. Those ideas should be grounded in well-developed cyber attack theory, distinct understanding of the cyber attack spectrum, and appropriately weighted effort along the cyber attack continuum.



Vice Admiral Michael Rogers, USN, commander U.S. Fleet Cyber Command and U.S. 10th Fleet, speaks to Information Dominance Corps Sailors at U.S. Naval Forces Southern Command

U.S. Navy (Robert Wood, Sr.)

National governments do not yet have well-defined cyber attack policies and strategies, a condition exacerbated by accelerating changes in power distribution, cyber technology, and other dynamics of the strategic environment. Contextual views of cyber attack, the cyber attack spectrum, balance of focus, and appropriate circumstances constitute a foundational framework upon which international actors could build such strategic guidance. For the United States in particular, the proposed approaches to each element lay a foundation for coherently shaping national guidance and international norms. A progressive view of both new types of activities and the dynamic new strategic environment in which they occur should form the impetus for developing more comprehensive cyber attack theory. Additionally, a wide-spectrum view that takes a more nuanced approach to categorizing cyber attacks combined with a focus toward the strategic attack end of the cyber attack continuum will properly shape U.S. perspective. Consequently, such perspective will inform a normative approach for determining the appropriate circumstances in which to conduct cyber attack, which will guide both U.S. action and modernization of international norms. The journey to open, distinct, and explicit cyber attack policy and strategy will take time. However, this framework

starts the United States down a deliberate path toward a more desirable—if yet to be determined—destination. **JFQ**

NOTES

¹ William A. Owens, Kenneth W. Dam, and Herbert S. Lin, eds., *Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyber-attack Capabilities* (Washington, DC: National Academies Press, 2009), 59.

² I am indebted to General Michael P.C. Carns, USAF (Ret.), Martin C. Libicki, and Joseph S. Nye, Jr., for their suggestions on framing this research.

³ Williamson Murry, MacGregor Knox, and Alvin Bernstein, eds., *The Making of Strategy: Rulers, States, and War* (New York: Cambridge University Press, 1994), 3–6, 22.

⁴ Richard A. Clarke and Robert K. Knake, *Cyber War: The Next Threat to National Security and What to Do About It* (New York: HarperCollins, 2010), 5–8.

⁵ The land, maritime, air, and space domains all exist naturally and, in general, possess physical delineations from each other. Even before the technology emerged to leverage the latter three for warfighting and other human purposes, the domains themselves existed. Cyberspace is fundamentally different. It is entirely created by man and is both physical and virtual, as well as mutable. It consists of the world's computers and the open and closed networks that connect them (including but not limited to the Internet and telecommunications networks): the hardware, network infrastructure,

software, resident data and information, and arguably the human operators of these elements. See Franklin D. Kramer, Stuart H. Starr, and Larry K. Wentz, *Toward a (Preliminary) Theory of Cyber-power* (Washington, DC: Center for Technology and National Security Policy, June 2008), 22–26, available at <www.dtic.mil/dtic/tr/fulltext/u2/a486839.pdf>; Joseph S. Nye, Jr., *The Future of Power* (New York: PublicAffairs, 2011), 122.

⁶ Greg Rattray, Chris Evans, and Jason Healey, “American Security in the Cyber Commons,” in *Contested Commons: The Future of American Power in a Multipolar World*, ed. Abraham M. Denmark and James Mulvenon, 143 (Washington, DC: Center for a New American Security, January 2010).

⁷ Eliot A. Cohen, “The Mystique of U.S. Air Power,” *Foreign Affairs*, January–February 1994, 109–124.

⁸ Interestingly, civil resistance researchers report that both the frequency and success rate of nonviolent resistance by nonstate actors against incumbent regimes and occupiers increased from 1900 to 2006. While not a focus of their work, cyber attack could play an important role in such resistance as a nonviolent (that is, does not cause physical harm) action—legal or illegal—or as a means of suppression by the target regime. See Erica Chenoweth and Maria J. Stephan, *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict* (New York: Columbia University Press, 2011), 6–15.

⁹ Nye, *The Future of Power*, 113–122: “Two great power shifts are occurring in this century: a power transition among states and a power diffusion away from all states to nonstate actors” (xv).

¹⁰ Michael N. Schmitt, "Cyber Operations in International Law: The Use of Force, Collective Security, Self-Defense, and Armed Conflicts," in *Proceedings of a Workshop on Deterring Cyber Attacks: Informing Strategies and Developing Options for U.S. Policy* (Washington, DC: The National Academies Press, 2010), 173–176, available at <www.nap.edu/catalog/12997.html>.

¹¹ Arthur K. Cebrowski, "Foreword," in *Rethinking the Principles of War*, ed. Anthony McIvor, xii (Annapolis: Naval Institute Press, 2005).

¹² Milan Vego, "On Military Theory," *Joint Force Quarterly* 62 (3rd Quarter 2011), 60, available at <www.ndu.edu/press/lib/images/jfq-62/JFQ62_59-67_Vego.pdf>.

¹³ James M. Dubik, "Introduction: Get on with It," in *Rethinking the Principles of War*, ed. Anthony McIvor, 1–2 (Annapolis: Naval Institute Press, 2005).

¹⁴ Nye, *The Future of Power*, 144; Clarke and Knake, *Cyber War*, 197–200.

¹⁵ Martin C. Libicki, *Cyberdeterrence and Cyberwar* (Santa Monica, CA: RAND, 2009), 117, available at <www.rand.org/multimedia/video/2012/02/22/cyberdeterrence-cyberwar.html>.

¹⁶ Gregory Rattray and Jason Healey, "Categorizing and Understanding Offensive Cyber Capabilities and Their Use," in *Proceedings of a Workshop on Deterring Cyber Attacks*.

¹⁷ Ibid., 81–83. Rattray and Healey use 12 factors to categorize offensive cyber operations. They focus on offensive operations analogous to computer network attack (excluding cyber espionage) conducted "between political actors operating across state boundaries or by nonstate actors for political purposes" (77).

¹⁸ Ibid., 82.

¹⁹ Ibid.

²⁰ Greg Rattray, *Strategic Warfare in Cyberspace* (Cambridge, MA: MIT Press, 2001), 18. Rattray's dissertation on which this book is based, "Strategic Information Warfare: Challenges of the United States" (The Fletcher School of Law and Diplomacy, May 1998), is available at <www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA346502>.

²¹ Rattray and Healey, 82.

²² Clarke and Knake, 197–200.

²³ John Rollins and Clay Wilson, *Terrorist Capabilities for Cyberattack: Overview and Policy Issues*, RL33123 (Washington, DC: Congressional Research Service, January 22, 2007), 3, available at <www.fas.org/srg/crs/terror/RL33123.pdf>.

²⁴ Unintended consequences, or spillover effects, may have positive or negative value from the perspective of the attackers. *Collateral damage* is a related, but not entirely equivalent concept.

²⁵ Schmitt, "Cyber Operations in International Law," 156–157.

²⁶ Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 2008), 2.

²⁷ Libicki, *Cyberdeterrence and Cyberwar*, 75–90.

²⁸ Rattray and Healey, 82.

²⁹ Rollins and Wilson, 19–25.

³⁰ Libicki, *Cyberdeterrence and Cyberwar*, 140–141.

³¹ Ibid., 86–91.

³² Rattray, 14.

³³ Andrew F. Krepinevich, *Cyber Warfare: A "Nuclear Option"?* (Washington, DC: Center for Strategic and Budgetary Assessments, 2012), 62–65, available at <www.csbaonline.org/wp-content/uploads/2012/08/CSBA_Cyber_Warfare_For_Web_1.pdf>.

³⁴ Rosemary M. Carter, Brent Feick, and Roy C. Undersander, "Offensive Cyber for the Joint Force Commander: It's Not That Different," *Joint Force Quarterly* 66 (3rd Quarter 2012), 22.

³⁵ Giulio Douhet, *The Command of the Air*, trans. Dino Ferrari (1942; rpt. Washington, DC: U.S. Government Printing Office, 1998), 180, available at <www.afhso.af.mil/shared/media/document/AFD-100924-017.pdf>.

³⁶ Clarke and Knake, 30–31.

³⁷ Libicki, "Chapter 6: Strategic Cyberwar," in *Cyberdeterrence and Cyberwar*, 117–137.

³⁸ Rattray, 120.

³⁹ The North Atlantic Treaty Organization's Cooperative Cyber Defence Centre of Excellence has produced the draft *Tallinn Manual*, a collective effort of experts to determine how the existing law of armed conflict applies to cyber attacks; however, this document reflects personal or collective views but not necessarily the views of states. It is neither binding nor sets precedent. Available at <www.ccdcoe.org/249.html>. See also Harold Hongju Koh, "International Law in Cyberspace: Remarks of Harold Koh," *Harvard International Law Journal Online* 54 (December 2012), available at <www.harvardilj.org/2012/12/online_54_koh/>; and Michael N. Schmitt, "International Law in Cyberspace: The Koh Speech and Tallinn Manual Juxtaposed," *Harvard International Law Journal Online* 54 (December 2012), available at <www.harvardilj.org/2012/12/online-articles-online_54_schmitt>.

⁴⁰ For example, in the context of *jus ad bellum*, debate centers on whether a cyber attack equates to a *use of force* or an *armed attack*. Some argue that the determination hinges on the consequences of the cyber attack rather than the instrument of attack itself. However, language in the United Nations Charter involves the manner of attack, as it was written prior to the emergence of cyber attacks when military force between state actors presented the primary threat. Some argue that if cyber attack effects resemble those of other military force generally considered *armed attack*, the cyber attack will likely be considered an armed attack. Similarly, if cyber attack effects resemble those of harmful actions (political, economic, or covert) that do not otherwise rise to the level of *use of force*, the cyber attack will not likely

be considered such. See Owens, Dam, and Lin, 251–252, 272.

⁴¹ Ibid., 262–272.

⁴² Ibid., 273–277.

⁴³ Rattray and Healey, 89–90.

⁴⁴ Martin C. Libicki, *Crisis and Escalation in Cyberspace* (Santa Monica, CA: RAND, 2012), 29–35, available at <www.rand.org/content/dam/rand/pubs/monographs/2012/RAND_MG1215.pdf>.

⁴⁵ Owens, Dam, and Lin, 240.

⁴⁶ Ibid., 277–282.

⁴⁷ Schmitt, "Cyber Operations in International Law," 177.

⁴⁸ Daniel Wagner and John Margeson, "The Globalization of Covert Action," *Huffington Post Online*, September 9, 2012, available at <www.huffingtonpost.com/daniel-wagner/globalization-of-covert-action_b_1869134.html>.

⁴⁹ Nye, *The Future of Power*, 117, 124–125; Rattray, 464.

⁵⁰ Martin C. Libicki, "The Specter of Non-obvious Warfare," *Strategic Studies Quarterly* 6, no. 3 (Fall 2012), 91–92, available at <www.au.af.mil/au/ssq/2012/fall/fall12.pdf>.

⁵¹ Owens, Dam, and Lin, 241.

⁵² For example, see *ibid.*, 57–62; Clarke and Knake, 261–264.

⁵³ Joseph S. Nye, Jr., "Nuclear Lessons for Cyber?" *Strategic Studies Quarterly* 5, no. 4 (Winter 2011), 18, 23, 36, available at <www.au.af.mil/au/ssq/2011/winter/winter11.pdf>.

⁵⁴ Vego, 60; Clarke and Knake, 151–155.

⁵⁵ Nye, "Nuclear Lessons for Cyber?" 24–25.

⁵⁶ Herman Kahn, *On Thermonuclear War* (New Brunswick, NJ: Transaction, 2007), 3–4, 38–39, 532, 576.

⁵⁷ Nye, *The Future of Power*, 144–145.

⁵⁸ Nye, "Nuclear Lessons for Cyber?" 26–29, 36.

⁵⁹ Bill Gates, "A Robot in Every Home," *Scientific American Online*, December 16, 2006, available at <www.scientificamerican.com/article.cfm?id=a-robot-in-every-home>; Peter W. Singer, *Wired for War* (New York: Penguin Press, 2009), 7–11.

⁶⁰ Rattray, 120.

⁶¹ Schelling, 153–168, discusses the conditions conducive for *precedent* to become *norm*.

⁶² Schmitt, "Cyber Operations in International Law," 177–178.

⁶³ A complete evaluation includes an appreciation of probability of outcome and level of confidence in the estimate.

⁶⁴ Schelling, 4–5, 69–78; Nye, "Nuclear Lessons for Cyber?" 25–26. Cyber attack could be the method (for example, a cyber attack to compel adversary action) or the object (for example, to deter cyber attack by the adversary). Also, cyber attack could be conducted alone or in conjunction with other instruments such as economic sanctions and kinetic strikes.

⁶⁵ Clarke and Knake, 197–209.



DOD (Glenn Fawcett)

The Cost of Culture Controlling DOD's Runaway O&M Spending

By JOEL J. LUKER

Since September 11, 2001, the Department of Defense (DOD) has been engaged continuously in combat. As operations subside and DOD attempts to recapitalize its forces, it faces a different yet extremely critical threat: unsustainable operations and maintenance (O&M) cost growth. O&M costs are skyrocketing, reducing funding available for recapitalization. With major budget cuts looming, DOD *must* address the root causes of the rising costs.

Several recent studies have attempted to pinpoint the root cause of the huge O&M cost growth. Many have discussed growing healthcare costs and others have dwelled on the increased use of contracted support.¹ These are only symptoms of the problem, not the root causes. *The O&M cost growth is, at its core, due to an underlying culture that does not incentivize development of cost-effective solutions.* DOD must counter this growth by instituting incentives and rewards that encourage unit-level commanders to

accomplish their assigned missions under budget. Effective incentives vary depending on whether DOD is operating at steady-state, in a war, or absorbing a postconflict drawdown. Potential solutions for each case are presented herein.

Background

O&M Defined. Six primary accounts comprise the DOD budget: O&M, military personnel (MILPERS), procurement, research and development (R&D), military construction (MILCON), and family housing. The current analysis focuses on O&M trends. O&M funds pay for DOD's "day-to-day" operating expenses including:

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*Training, supply, and equipment maintenance of military units as well as the administrative and facilities infrastructure of military bases; salaries and benefits for most DOD civilian employees; depot maintenance activities; fuel purchases; flying hours; base operations; consumable supplies; health care for Active-duty Service personnel and other eligible beneficiaries; Reserve Component operations; and DOD-wide support operations including several combat support agencies, four intelligence agencies, and other agencies that provide common information services, contract administration, contract audit, logistics, and administrative support to the military departments.*²

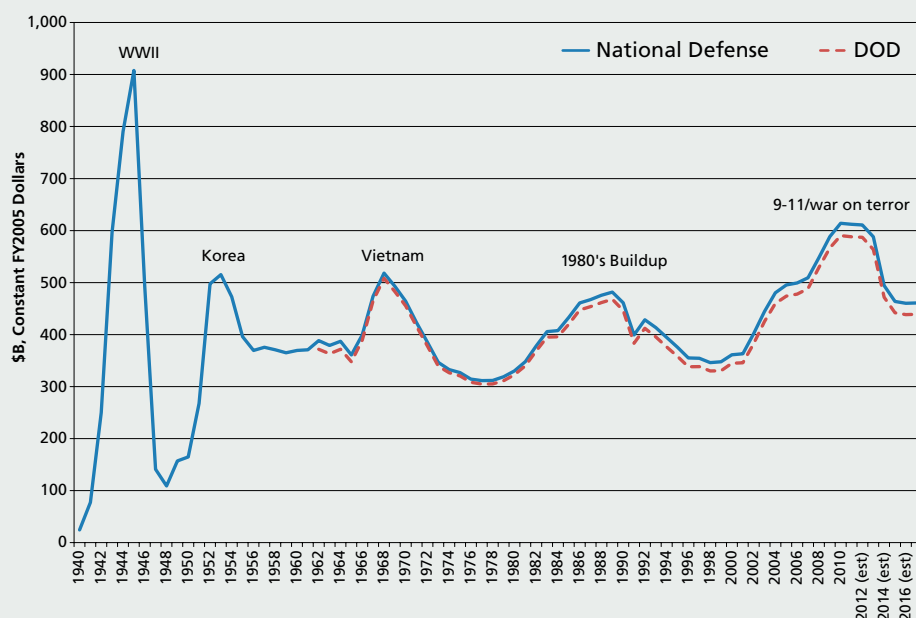
In addition to the regular (“base”) budget, Congress can approve supplemental appropriations. Unless otherwise specified, the budget data presented herein include the total funding provided to DOD—both the base budget and supplemental funds—and will be in fiscal year (FY) 2005 dollars. Also, for visual “smoothness” of the graphs, the partial-year “TQ” budget data from 1976 (when the start of the FY shifted from July to October) are not included.³

O&M Trends

The DOD budget has nearly doubled since 9/11 (figure 1), with O&M costs skyrocketing (figure 2). Although figure 2 also shows increases in MILPERS, procurement, and R&D spending, O&M costs grew faster, thus increasing the O&M share of the DOD budget (figure 3). This relative growth in O&M spending is squeezing out funds available for recapitalization (procurement and R&D), a process sometimes referred to as a “weakening of the defense dollar.”⁴ Because of O&M growth, each taxpayer dollar no longer buys the same amount of new defense capabilities.

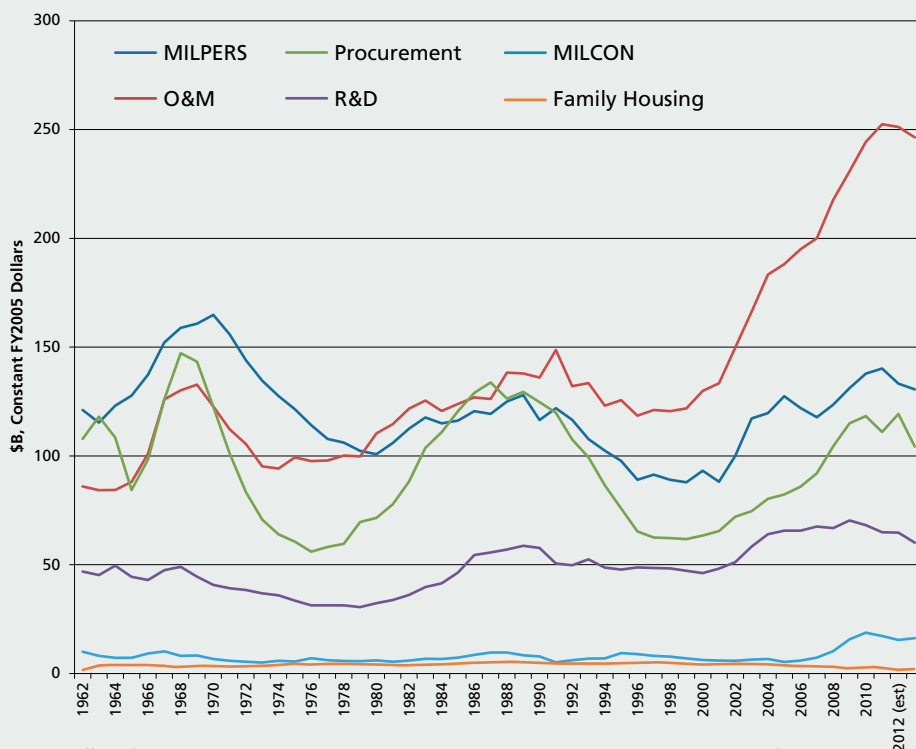
Two top-level metrics exist to track and assess O&M trends. The first is a simple analysis of the O&M history from figure 3. Aside from the 1980s Reagan-era buildup (which injected huge sums into procurement, thus reducing the percentage going towards O&M), O&M has steadily consumed an increasing share of DOD’s budget (figure 4). The two trend lines in figure 4 are exactly parallel, indicating that the rate of increase (as a percentage of the DOD budget) has been nearly constant at approximately 0.63 percent per year. While 0.63 percent may not sound extravagant, over time the

Figure 1. National Defense Budget History



Source: Office of Management and Budget, “Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017,” available at <www.whitehouse.gov/omb/budget/Historicals>. Table 10.1 provides scale factors to convert the raw budget numbers into fiscal year 2005 constant dollars. See “Historical Tables, Table 10.1—Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2017.”

Figure 2. DOD Budget History by Major Appropriation Category

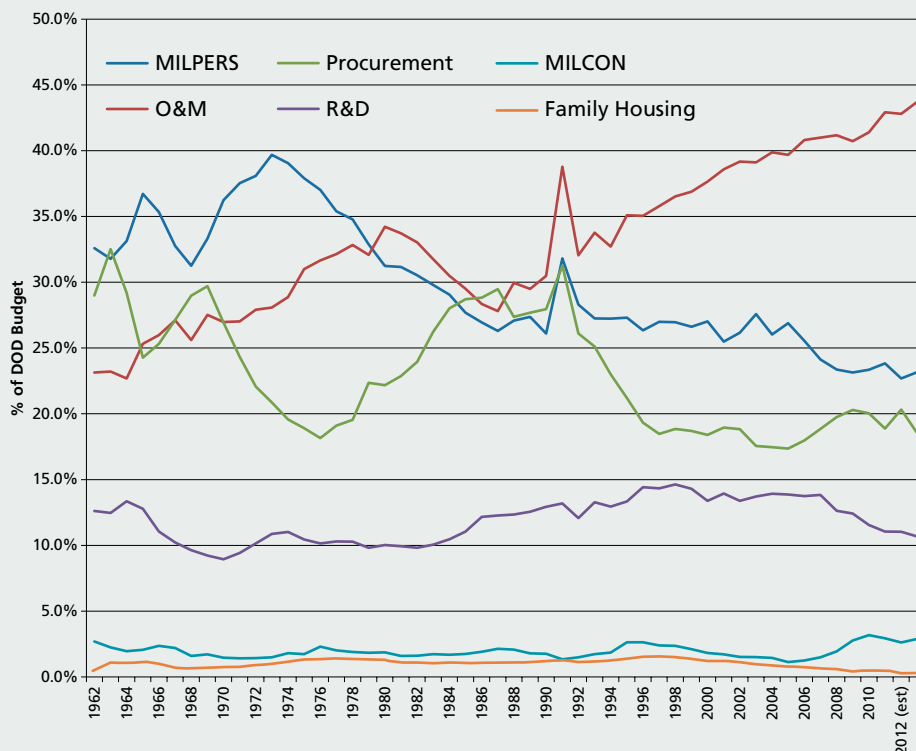


Source: Office of Management and Budget, “Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017,” available at <www.whitehouse.gov/omb/budget/Historicals>.

continual growth has accumulated to the point where it has become significant and has led to the weakening of the defense dollar mentioned above.

The Congressional Budget Office (CBO) prefers to assess O&M spending in terms of operating cost per Active-duty soldier (figure 5).⁵ Despite the Reagan

Figure 3. DOD Budget History by Major Appropriation Category (Percentage)



Source: Office of Management and Budget (OMB), "Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017," available at <www.whitehouse.gov/omb/budget/Historicals>. Calculated by author using data provided in OMB historical tables.

buildup and post–Cold War “peace dividend,” the *growth* in the O&M cost per soldier was relatively constant from 1980 to 2001, at approximately \$2,300 per year.⁶ The CBO’s major concern is that after 9/11, the cost per soldier departed significantly from the historical trend. It is now considerably more expensive to support each soldier in the field.

In addition to the general growth in O&M spending, after each previous major buildup O&M funds never returned to their pre-surge levels (see figure 6). Prior to Vietnam, O&M funding averaged approximately \$84 billion; during the postwar drawdown, it plateaued to around \$100 billion (a 19 percent increase). After the 1990s peace dividend drawdown, steady-state O&M funding grew another 20 percent to \$120 billion. Thus, the postdrawdown O&M budget tends to plateau approximately 20 percent above its prebuildup value. If history is any indicator, one could expect that future budget cuts would not return O&M spending to its pre-9/11 state.

The continual growth of O&M costs, particularly the post-9/11 explosion, has raised serious concerns. Because O&M

spending comprises the largest share of the U.S. defense budget, any deep cuts *must* include significant reductions in O&M. These reductions cannot be a “one time good deal”; DOD must also make core procedural and/or cultural changes to arrest the relative O&M cost growth (figure 4) that is weakening the defense dollar. There are several underlying causes driving these increases, depending on whether one examines steady-state growth, the wartime cost explosion, or postconflict drawdowns.

Use It or Lose It: Steady-state O&M Growth

Upon entering the main gate of nearly any operational Air Force base, one of the first sights greeting a visitor will be a board showing progress on the flying hour program—specifically, the hours remaining to burn off before the end of the year. The goal is to use them all. The fact that these boards are so universally accepted highlights a significant problem driving O&M cost growth: the “use it or lose it” culture. Although this example is from the Air Force, that mentality is universal throughout DOD.⁷

The use-it-or-lose-it theory advocates that a commander must spend his entire allocated budget each year or suffer probable budget cuts the following year. If a unit does not spend all its funds, it obviously did not need them all. In addition, commanders who acquire external funds to bolster their budget are often praised; increasing one’s operating budget is viewed as a good thing.⁸ With this mindset (barring any major directed cuts), *the O&M budget has nowhere to go but up.*

Others examining O&M growth trends have proposed alternative rationales for the shift of funds from investment to operations. Possible reasons include increased costs for operating new weapons systems, operating old weapons systems, civilian personnel compensation, health care, installation security, and changes to acquisition approaches.⁹ Because O&M encompasses so many functions, these analysts deem it nearly impossible to determine the cause of the overall growth and therefore refrain from recommending corrective actions.¹⁰ They ignore a key commonality among all these issues: an underlying culture that does not incentivize a commander to execute his mission under budget and return the unspent funds.

To halt the continual rise of O&M spending, DOD must institute incentives and rewards that encourage unit-level commanders to accomplish their assigned missions under budget. As with any cultural change, this will be difficult to implement effectively. It will require buy-in across all Services, from both commanders and the thousands of financial managers ingrained with the use-it-or-lose-it mentality. Accordingly, unit-level programs are likely to prove the most effective. Senior leaders should establish tailored savings goals for subordinate units as well as determine incentives for achieving those goals. Lower level commanders must retain the flexibility to determine how best to achieve the prescribed goals.

An incentive program modeled on a cost-plus-incentive fee (CPIF) type of contract might prove effective. In CPIF contracts, a contractor receives (as additional profit) a share of any savings that occur if he completes the contract under budget. A similar incentive for a commander would be to restrict initially any “quality of life” (QOL) funds, and then release them if the unit attains predetermined performance milestones under budget. The QOL funds released to the unit would be proportional to the amount saved. The intent

is *not* to reduce the QOL funds available to the troops; rather, it is to reduce mission operating costs by linking a desired reward to stated efficiency goals.

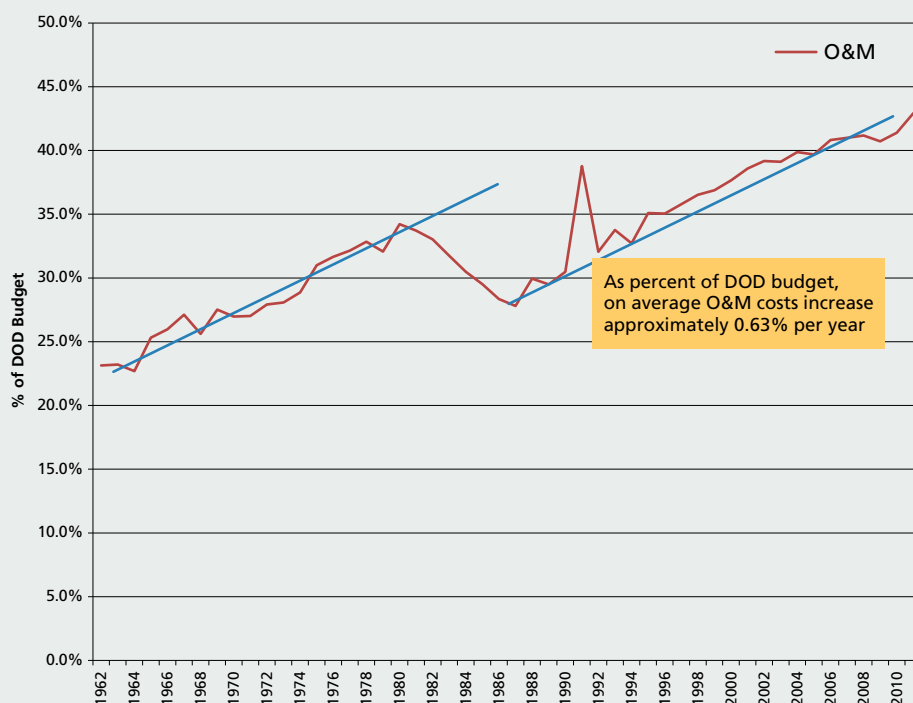
Also, this recommendation drives a requirement to possibly modify funding availability at the strategic level. Because a unit would not receive its QOL funds until *after* it met a given milestone, there would be a lag between when it accomplished the work and when it received the reward. Across the FY break, this implies QOL funds from one year paying for milestones achieved the previous fiscal year. Especially when operating on a continuing resolution, the QOL funds may not be available for several months into the new fiscal year. Resolving implementation details would require careful consideration of how to deal with such situations.

Ultimately, whatever system is chosen, DOD must find a way to incentivize both the commander and his personnel to execute the mission cost effectively. Note that being cost effective is not the same as being efficient with taxpayer dollars. Most commanders are currently good at getting the most out of the dollars they are given (they are efficient), but they are not incentivized to execute the mission with fewer dollars (cost effectiveness). With incentives in place to emphasize cost effectiveness, over time a culture would emerge that promoted the creativity to design alternate ways to achieve the same ends with fewer means—a culture that bred true strategic thinkers. That would have the positive secondary impact of creating wartime planners who considered operational effectiveness while controlling O&M costs—something not found in today's wartime operations.

Wartime Worries

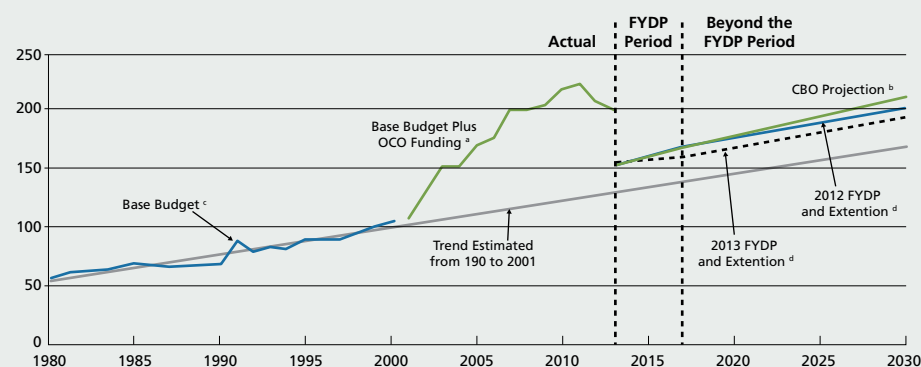
Assessments in the literature primarily focus on two major areas as potential root causes of exploding wartime O&M costs: increases in healthcare spending and the use of contractors to accomplish tasks previously conducted by military personnel.¹¹ While both of these issues *have* resulted in substantial cost increases, they are insufficient to explain the majority of the growth. Analysts tend to rationalize the remaining growth simply as costs associated with post-9/11 operations.¹² In addition, although these discussions reveal that DOD has a problem, they do not delve into the root cause(s) driving the growth, let alone provide recom-

Figure 4. DOD O&M Budget Trends



Source: Office of Management and Budget (OMB), "Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017," available at <www.whitehouse.gov/omb/budget/Historicals>. Calculated by author using data provided in OMB historical tables.

Figure 5. O&M Costs Per Active-duty Servicemember (Thousands of FY13 Dollars)



Source: U.S. House of Representatives Committee on the Budget, *Long-Term Implications of the 2013 Future Years Defense Program* (Washington, DC: Congressional Budget Office, 2012), 19.

Note: FYDP = Future Years Defense Program; FYDP period = 2013 to 2017, the years for which DOD plans are fully specified.

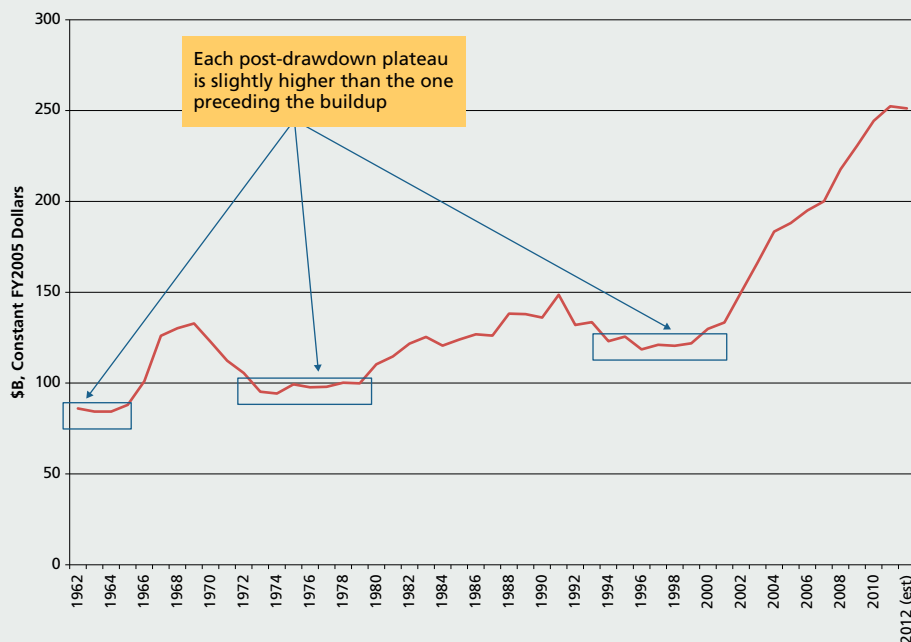
Key: a. For 2002 to 2013, supplemental and emergency funding for overseas contingency operations, such as those in Afghanistan and Iraq, and for other purposes is shown separately from the base-budget data. b. CBO projection of the base budget incorporates costs that are consistent with DOD recent experience. c. Base-budget data include supplemental and emergency funding before 2002. d. For the extension of the FYDP (2018 to 2030), CBO projects the costs of DOD plans using the department's estimates of costs to the extent they are available and costs that are consistent with CBO's projections of price and compensation trends in the overall economy where the department's estimates are not available.

mendations for how to fix the problem(s).¹³ They miss the opportunity to address the true problem: an insatiable wartime appetite for resources that remains unchecked by the civilian leadership.

Chasing the Symptoms, Not Treating the Disease

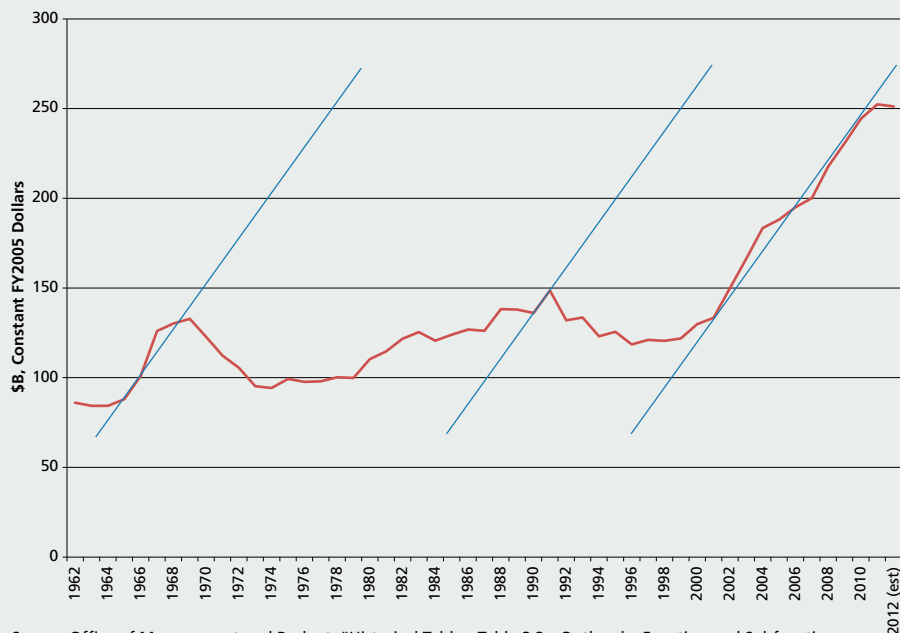
DOD healthcare costs have more than doubled since 9/11, and budget analysts are rightly concerned about how to curb the

Figure 6. DOD O&M Budget Postdrawdown Growth



Source: Office of Management and Budget, "Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017," available at <www.whitehouse.gov/omb/budget/Historicals>.

Figure 7. Wartime O&M Cost Growth



Source: Office of Management and Budget, "Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2017," available at <www.whitehouse.gov/omb/budget/Historicals>.

contractor support to meet wartime demands without significantly expanding Active-duty end strength.¹⁵ Between 2000 and 2005, support contract costs grew by \$37.5 billion (73 percent), or approximately 31 percent of overall O&M cost growth—a larger share than health care, but still not sufficient to explain the problem in its entirety.¹⁶ One cannot simply sum the 20 percent increase attributed to health care and the 31 percent increase due to support contract and say that, between them, they account for 51 percent of the overall O&M cost growth; approximately 14 percent of the contract support cost growth was for healthcare purposes, meaning the two areas overlap and the sum will be less than 51 percent.¹⁷ In addition, one would expect the infusion of contractors to be a step-factor expense that jumped once and then leveled off over time, but that was not the case.

The question, then, is after personnel arrived in theater and the mission had somewhat stabilized, why did costs continue to grow? One might attribute this to continued growth in the number of deployed personnel: additional troops should have meant associated O&M costs. Although the number of troops in Iraq and Afghanistan *did* grow over time, O&M cost growth outstripped the increases in deployed personnel. For instance, between 2005 and 2008, the number of military personnel in Iraq and Afghanistan increased 15 percent, but the corresponding O&M costs increased 48 percent.¹⁸ Something else was the culprit.

An Insatiable Appetite

To understand what is truly causing DOD's huge O&M costs, one must first realize that *the current O&M growth rate is not significantly different than that seen during previous large-scale combat operations*. Figure 7 compares the wartime O&M growth rates for the first Gulf War, Vietnam War, and current operations. The trend lines in figure 7 are simply an extension of the increase seen for the Gulf War copied and pasted over the Vietnam and post-9/11 timeframes. Comparing the three major conflicts, one can see that in Vietnam, the first year matched the Gulf War rate (approximately \$12.6 billion per year) and then increased for 1 year, and finally leveled off significantly in 1967 (more on that later). The post-9/11 operations *on average, over time* had the same slope as the Gulf War buildup. The difference was that the Gulf War lasted less than 1 year while the post-9/11

increases. However, one must also put these trends into context and compare them with overall O&M cost growth. Since 9/11, health-care costs have increased approximately \$28 billion in FY13 dollars (\$23.5 billion in FY05 dollars).¹⁴ This is about 20 percent of the overall O&M cost growth. This is significant,

but it is not nearly enough to explain the entire problem.

Similarly, the costs associated with contracted support, although they are increasing substantially, do not explain the entire O&M growth phenomenon either. Since 9/11, the military has relied on increased

growth remained unchecked for 10 years. This unrestricted wartime growth in O&M costs is the crux of the current dilemma.

The near-constant post-9/11 O&M growth rate equates to increasing the wartime effort by the same amount each year of operations. In essence, DOD throws \$12.6 billion at the problem the first year; if the problem persists, DOD obviously did not apply enough effort, so it requests that same \$12.6 billion, *plus an additional* \$12.6 billion the next year. Still not done in the third year of conflict, DOD requests more—and so on until, after more than a decade of war, O&M costs have increased \$119 billion, or 89 percent. The prevailing military doctrine (“Powell Doctrine”) reinforces this tendency to continually ask for more. The Powell Doctrine states that if the United States is going to use military force, it should do so overwhelmingly and crush the enemy.¹⁹ The inverted implication is that, if we have not yet crushed the enemy, we have not yet applied enough military force. Like *Oliver Twist*, the military has a predisposition to continually ask for more as long as combat operations persist.

For example, consider the Army’s desire for full-motion video support (from the Air Force) in Iraq and Afghanistan. The Air Force supplied 10 Predator Combat Air Patrols (CAPs) in 2007 but the Army wanted more.²⁰ A goal was agreed on to obtain 21 CAPs by 2010, which the Air Force reached in 2008.²¹ The Army wanted more. DOD allocated an additional \$2 billion to boost the number to 50 CAPs by 2011.²² The Army wanted more. The current goal is 65 CAPs by 2013 and about 125 by the end of the decade.²³ Throughout these increases, the Air Force—not the Army—paid the bill in both dollars and manpower. As a result, there was no incentive for the Army to curb its ever-increasing requests for additional support. The intent is not to berate the Army. This example is simply well documented and highlights a key structural problem with cost control in joint operations.

Specifically, the supported-supporting construct within joint operations does not contain natural incentives to curb the appetite of a supported Service. The supported Service can continually ask for more, and the supporting Service pays the bill. In fact, some may argue that the Pentagon culture actually incentivizes the supported Service to ask for more. If the Services view the DOD budget as a zero-sum game, uncontrolled resource requests essentially allow the sup-

ported Service to hijack part of the supporting Service’s budget. This is doubly beneficial for the supported Service in that it obtains more funding *at the expense of the other Service*, de facto doubling its budgetary status gain relative to the other Service.

While some might argue that these wartime expenditures were justified to reduce casualties, the fact is that “nearly half of the growth in defense spending over the past decade is unrelated to the wars in Afghanistan and Iraq.”²⁴ The military’s first impulse is to get what it can while the checkbook is open, which is the result of the culture, established during peacetime, that, first, does not value

civilian leadership exacerbates this problem: who are *they* to contradict the advice of the Nation’s most experienced military personnel?²⁶ One of the fundamental principles underpinning America’s concept of civilian control over its military—that civilian leaders determine how much blood and treasure the Nation will expend to achieve its objectives—has broken down.

Post-9/11, the one civilian leader with significant defense experience who pushed back on the military plans—Donald Rumsfeld—was vilified by both the military and media as a micromanager.²⁷ They ignored the fact that *Rumsfeld’s establishment of limits*

the root cause of the wartime cost growth is simply an insatiable DOD appetite that remains unchecked by system-intrinsic incentives and the military culture

executing the mission under cost and, second, rewards those who can bring in external funds to bolster their unit’s budget. Thus, the (primary) root cause of the wartime cost growth is simply an insatiable DOD appetite that remains unchecked by system-intrinsic incentives and the military culture. It therefore falls on the civilian leadership (including but not limited to the President, Secretary of Defense, and Congress) to repulse the onslaught of defense funding requests, but their ability to do that during wartime is politically tenuous.

The failure in Vietnam effectively neutered the civilian leadership’s ability to reject military wartime resource requests. As mentioned briefly above, one can see in figure 7 that the Vietnam O&M expenditure rate tapered off significantly in 1967. One might believe this indicates that the “*Oliver Twist*” theory presented herein is flawed and that the 1967 leveling off occurred naturally. But in 1967, General William Westmoreland *had* asked for more but President Lyndon Johnson denied his request.²⁵ The most significant outcome of this denial was that when the United States lost Vietnam, the civilian leadership suffered a reduction in political control over the military. No wartime President (or Congress) wants to appear as withholding resources requested by the military, thereby taking unnecessary casualties and risking another defeat, especially in a limited war where the country is not fully mobilized and has apparent Reserve forces to spare. The lack of military credentials within the current

on the allocated resources was part of his job. Rumsfeld’s failure was not a result of limiting the resources allocated to the Iraq War; rather, it was not pushing the military for a workable strategy to secure the peace within the existing resource constraints (developing alternate solutions that adjusted the ends or ways to fit the means available) and not challenging the assumptions on which U.S. Central Command based its “Phase 4” planning.²⁸ Yet the resultant struggles in Iraq reinforced the military’s “we told you we needed more” attitude. With the country wary of finding itself in another Vietnam, military leaders recognized the leverage they possessed and pushed for additional resources. President George W. Bush eventually approved a 2007 “surge” in Iraq. By leaking its Afghanistan surge request the following year, the military effectively forced President Barack Obama (who had promised to scale down the two wars) to concede to its demands as well.²⁹ In short, U.S. civilian leaders’ inability to suppress their military’s insatiable wartime appetite was the principal driver behind the post-9/11 escalation in O&M costs.

The Foundation of Any Diet: Changing One’s Eating Habits

Based on the above discussion, constraining DOD O&M expenditures during long-duration conflicts may appear to require a restoration of the civilian leadership’s political ability to say “no” to military resource requests. However, that would require the President and Congress to receive advice from

a source that can effectively challenge a combatant command's war plans, and doing so is more difficult than it sounds. As a result, the solution is, once again, to change the underlying DOD culture to promote development of cost-effective solutions.

The President already has an independent advisor to review combatant command plans: U.S. law tasks the Chairman of the Joint Chiefs of Staff (CJCS) to review contingency plans.³⁰ However, based on the results since 9/11, this arrangement is obviously not effective at controlling the costs of conflict. The same chains that shackle combatant command staffs also bind the CJCS offices: they have all matured in the same culture that promotes the use of "overwhelming force" and does not incentivize or reward cost-effectiveness. As a result, Joint Staff members tend to view the problem through the same lens and gravitate toward the same solutions as the combatant command staffs. This similarity in viewpoints also ties into the second major problem, which is that any effective critique of the war plans must include "not just an evaluation of the means actually employed, but of *all possible means* . . . one can, after all, not condemn a method without being able to suggest a better alternative."³¹ Today's war plans are so complex that maintaining the ability to suggest effective alternate solutions across all combatant commands simultaneously would require a monstrous, untenable Joint Staff.

A new, independent body might appear to be an alternate solution. Naval War College professor John Garofano previously identified a similar problem with the President obtaining genuinely independent advice regarding *when* to go to war.³² One might propose expanding his "President's Advisory Board on the Use of Force" concept to examine *how* the military plans to go to war, not just *when* it should go. Although this idea would mitigate the cultural bias inherent in the CJCS staff, it would suffer from the same problems regarding the size of the staff required to submit feasible alternative solutions.

In addition, from an efficiency standpoint, a review by either the CJCS or an independent panel is "non-value-added work," or overhead in Lean Six-Sigma parlance. Such a review adds extra steps to the war plan production process without adding significant value to the final plan. Without the ability to propose effective alternate solutions, an oversight body's only real purpose and ability

is to say "no—this is wrong, go fix this," so over time the process will, on average, become slower. This is obviously not desirable, particularly for contingency planning. In addition, from a process efficiency point of view, the goal should not be to make such a review effective, but to eliminate the need for it altogether. The solution is to make the initial war plans cost effective from the start.

Therefore, to constrain wartime O&M cost growth, the solution is similar to that required to fix the steady-state growth problem: DOD must change its underlying culture. The department must train its combatant command staffs to consider cost effectiveness as a metric when assessing proposed courses of action. It must develop an incentive system that encourages staffs to produce resource-constrained plans from the outset. Developing this culture during normal steady-state operations will be vital to establishing the foundation upon which to build during wartime contingencies. The resulting minimization of wartime cost growth should produce a side benefit as well: it would minimize the impacts of any post-conflict drawdown.

The Battle after the War: Postconflict Drawdown

As discussed previously (figure 6), during a postbuildup drawdown, the O&M budget has a tendency to stabilize approximately 20 percent above its value preceding the surge. Because all three Services possess aging weapons systems that require recapitalization, it becomes imperative to restore the balance between the operations and investment accounts.³³ O&M currently consumes 43 percent of DOD's budget (see figure 3). Based on DOD's projected postdrawdown budget (figure 1), "resetting" O&M to a 30 percent share (the level seen during the 1980s, the last period of major recapitalization) provides a target O&M budget of approximately \$130 billion, its pre-9/11 value.³⁴ Therefore, to support its recapitalization plans, DOD must break its habit of stabilizing O&M costs at a higher plateau after each drawdown.

From a purely budgetary perspective, the solution is simple: cut O&M deeper than desired. This, however, is easier said than done. We already see DOD leaders pushing back against potential cuts, attempting to anchor the debate at the "new normal."³⁵ Despite the fact that the DOD budget has nearly doubled in the past 10 years, they claim

anything more than a 10–15 percent cut will make the force "hollow." Determining where to make O&M cuts is also difficult because the O&M budget finances such a wide variety of items. It is nearly impossible to determine where to apply massive cuts using a "bottom up" approach.³⁶ Therefore, DOD must implement cuts using a top-down methodology and align them with its planned strategic posture.

While a detailed suggestion of which programs should face reductions is well beyond the scope of this analysis, logically the Army O&M account should absorb the brunt of the cuts. Between 2001 and 2011, the Army O&M budget grew 251 percent, the Navy and Marine Corps 58 percent, and the Air Force 56 percent.³⁷ In addition, the "pivot to the Pacific" strategy is highly weighted toward capabilities provided by the Navy and Air Force. With a goal of returning O&M spending to the pre-9/11 levels, the Army's account therefore becomes the obvious primary target.

With a requirement to recapitalize its forces after 10 years of continuous combat, and do it during a period of massive budget reductions, DOD must take action now to halt its runaway O&M spending. In the short term, the current drawdown must reduce expenditures back to their pre-9/11 levels. Longer term, DOD must instill a culture that values, incentivizes, and rewards its personnel for achieving the desired mission results, but under budget. Such a culture would arrest the slow but steady growth of O&M as a percentage of DOD's budget that has led to a "weakening of the defense dollar." This culture will also foster the creativity required to execute long-duration wartime operations in a cost-effective manner. The civilian leadership's ability to say no to the military is limited politically during wartime, and the military must stop taking advantage of that fact. The Nation simply cannot afford its military's insatiable appetite for "more." Instilling a culture during peacetime that values cost-effective solutions will provide the foundation on which to curb this appetite. Finally, as DOD continues the drawdown in the Middle East, it must "reset" O&M spending to pre-9/11 levels in order to reclaim funds needed for recapitalization and modernization. Because of the large O&M cost growth since 9/11, this means cuts must be deeper than currently planned. The resulting changes require DOD to restructure the way it normally does business, making today the

perfect time to begin establishing a culture that values and promotes cost-effectiveness within the department. DOD literally cannot afford to do otherwise. **JFQ**

NOTES

¹ For health costs as a primary driver, see U.S. House of Representatives Committee on the Budget, *Long-Term Implications of the 2013 Future Years Defense Program* (Washington, DC: Congressional Budget Office, 2012), 20–23; Anthony H. Cordesman and Robert Hammond, *The Coming Challenges in Defense Planning, Programming and Budgeting* (Washington, DC: Center for Strategic and International Studies [CSIS], 2010), 32. For increased use and cost of contractor support, see Committee on the Budget, 18; Government Accountability Office (GAO), *Defense Budget: Trends in Operation and Maintenance Costs and Support Services Contracting* (Washington, DC: GAO, 2007).

² GAO, 6.

³ Cost figures are in fiscal year (FY) 2005 dollars for comparison to the Office of Management and Budget (OMB) historical tables, available at <www.whitehouse.gov/omb/budget/Historicals>. The author converted data to FY05 dollars using the “Total Defense” deflators found in OMB, “Historical Tables, table 10.1—Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2017,” available at <www.whitehouse.gov/omb/budget/Historicals>.

⁴ Clark A. Murdock, Ryan A. Crotty, and Kelley Saylor, *Planning for a Deep Defense Drawdown—Part I* (Washington, DC: CSIS, 2012), 1; “The Cost of the Force,” *Air Force Magazine*, April 2009, 39; Todd Harrison, *Analysis of the FY 2010 Defense Budget Request* (Washington, DC: Center for Strategic and Budgetary Assessments, 2009), 11.

⁵ Committee on the Budget, 18–19.

⁶ Ibid.

⁷ Per discussions with Navy, Marine, and Army counterparts.

⁸ From the author’s last performance report: “secured \$4.3M” and “garnered \$800M” [of external funds]. An award narrative similarly highlighted the fact that he was able to nearly double the Squadron’s operating budget by foraging for funding from outside sources. The fact that these sorts of statements appear on performance reports and award write-ups indicates they are viewed positively by the organization.

⁹ GAO, 11; “The Cost of the Force,” 39.

¹⁰ For example, “Why this is the case—and what to do about [it]—is a matter that is far beyond the scope of this brief survey.” “The Cost of the Force,” 39. Also “GAO is not making any recommendations,” in preamble to *Defense Budget: Trends in Operation and Maintenance Costs and Support Services Contracting*.

¹¹ For health costs as a primary driver, see Committee on the Budget, 20–23; Cordesman and Hammond, 32. For increased use and cost of contractor support, see Committee on the Budget, 18; GAO.

¹² See, for example, *Defense Budget: Trends in Operation and Maintenance Costs and Support Services Contracting*, 3; Committee on the Budget, 18; Cordesman and Hammond, 36; Harrison, 9.

¹³ For example, “Why this is the case—and what to do about [it]—is a matter that is far beyond the scope of this brief survey.” “The Cost of the Force,” 39; “GAO is not making any recommendations,” in preamble to GAO, *Defense Budget: Trends in Operation and Maintenance Costs and Support Services Contracting*.

¹⁴ Committee on the Budget, 21. The author converted data from the reference from FY13 to FY05 constant dollars using the FY13 scale factor of 1.1936 from OMB.

¹⁵ GAO, 15.

¹⁶ Ibid., 16. Costs in table 1 of that document were provided in FY07 dollars as \$40.6 billion. These costs equated to \$37.5 billion in FY05 dollars using a scale factor of 1.0826 from OMB.

¹⁷ For a breakout of the contract support cost growth, see table 1 in GAO, 16.

¹⁸ Amy Belasco, *Troop Levels in the Afghan and Iraq Wars, FY2001–FY2012: Cost and Other Potential Issues*, R40682 (Washington, DC: Congressional Research Service, 2009), 54.

¹⁹ Karen DeYoung, *Soldier: The Life of Colin Powell* (New York: Knopf, 2006), 210; Colin Powell and Joseph E. Persico, *My American Journey* (New York: Random House, 1995), 148–149.

²⁰ Grace V. Jean, “Air Force Responding to Insatiable Demand for Surveillance Drones,” *National Defense*, July 2009, available at <www.nationaldefensemagazine.org/archive/2009/July/Pages/AirForceRespondingtoInsatiableDemandforSurveillanceDrones.aspx?PF=1>.

²¹ U.S. Air Force, “Predator Caps Double in One Year,” May 6, 2008, available at <www.af.mil/news/story.asp?id=123097490>.

²² Jean; John A. Tirpak, “The RPA Boom,” *Air Force Magazine*, August 2010, available at <www.airforce-magazine.com/MagazineArchive/Pages/2010/August/percent202010/0810RPA.aspx>.

²³ For 65 Combat Air Patrols (CAPs) by 2013, see “The RPA Boom,” 38. For 125 by the end of the decade, “The RPA Boom,” 36, states that the Air Force fleet will be up to 509 Predator/Reaper aircraft by the end of the decade, and four aircraft are required for a single CAP, 38.

²⁴ Murdock, Crotty, and Saylor, 8.

²⁵ Stephen B. Young, “President Lyndon B. Johnson’s Vietnam War Disengagement Strategy,” *Vietnam*, February 1998, published online June 12, 2006, available at <www.historynet.com/president-lyndon-b-johnsons-vietnam-war-disengagement-strategy.htm>.

²⁶ See discussion on “McMasterism,” in Mackubin T. Owens, *What Military Officers Need to Know About Civil-Military Relations* (Newport, RI: Naval War College, 2011), 10.

²⁷ Michael R. Gordon and Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York: Pantheon, 2006), chapters 2–3; Bob Woodward, *Plan of Attack* (New York: Simon and Schuster, 2004), 6.

²⁸ John Garofano, “Effective Advice in Decisions for War: Beyond Objective Control,” *Orbis* 52, no. 2 (2008), 252.

²⁹ Stephen J. Wayne, “Presidential Character and Judgement: Obama’s Afghanistan and Health Care Decisions,” *Presidential Studies Quarterly* 41, no. 2 (June 2011), 297.

³⁰ Goldwater-Nichols Department of Defense Reorganization Act of 1986, 99–433, 10 U.S.C. § 153. See Title 10, Subtitle A, Part I, Chapter 5, § 153, paragraph (a)(3)(A).

³¹ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 161.

³² Garofano, 249.

³³ See, for example, Robert P. Lennox, *US Army Modernization Plan* (Washington, DC: Headquarters Department of the Army, 2012). Also see the recent series of op-ed articles from Secretary of the Air Force Michael Donley, “Air Force Secretary Op-eds,” *AOL Defense*, January 8–11, 2013, available at <<http://defense.aol.com/tag/Air+Force+Secretary+op-eds/>>.

³⁴ From figure 1, the postdrawdown DOD budget is projected to be approximately \$439 billion; 30 percent of that value is roughly \$130 billion (in FY05 dollars).

³⁵ Donley.

³⁶ “The Cost of the Force,” 39.

³⁷ The author calculated the cost growth using data from the Department of Defense Comptroller Web site, as well as conversion factors from OMB to convert the data to FY05 dollars. The table below presents the data (the deflation factors used are located under the respective 2001 or 2011 “FY05” column header). The FY01 data were from Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, “Operation and Maintenance Programs (O-1), Department of Defense Budget for Fiscal Year 2001,” Washington, DC, 2000, 1. The FY11 data were in “Operation and Maintenance Overview: Fiscal Year 2013 Budget Estimates,” Washington, DC, 2012. The OMB historical tables provided the conversion factors. See OMB. The point is also valid using data from 2001 to 2005. During that period, the Army’s O&M costs grew 137 percent, the Navy’s 30 percent, and the Air Force’s 29 percent. See GAO, 3.

	2001		2011		Growth			
	Real	FY05	Real	FY05	Real	%	FY05	%
		0.8394		1.153	\$	%	\$	%
Army	\$23.8	\$28.4	\$114.9	\$99.7	\$91.1	382%	\$71.3	251%
Navy	\$27.1	\$32.3	\$58.8	\$51.0	\$31.7	117%	\$18.7	58%
Air Force	\$27.7	\$33.0	\$59.2	\$51.3	\$31.5	114%	\$18.3	56%



Crowd gathers in excitement near Ground Zero after hearing Osama bin Laden was killed in raid in Abbottabad, Pakistan

The Elusive Defeat of al Qaeda

By GINA M. BENNETT

When the United States began its war on al Qaeda in September 2001, the objective was to destroy the group by eliminating its leadership, dislodging the group from Afghanistan, and preventing future al Qaeda terrorist operations.¹ Americans also hoped to reduce the appeal of al Qaeda's message, particularly among the populations the group targeted for recruitment and support. Washington viewed these goals as representing victory in the war on terror, or at least the war on al Qaeda.

This concept of victory against al Qaeda differed, however, from the group's vision of its own defeat, and according to terrorism experts such as Peter Bergen, this critical disconnect continues to obscure whether the war is over.² The disparity resulted from several inextricable paradoxes, the first of which emerged early when the highly publicized term *war* unintentionally elevated al Qaeda's stature to that of a state enemy. But since al Qaeda was not a traditional enemy, conventional concepts of defeating one's foe through annihilation or attrition may never have fully applied to it.

As a fringe Muslim extremist ideology, al Qaeda drew from dozens of nationalities but spoke for no set population the way states or subnational actors do. Despite its use of Taliban-controlled territory, it did not operate as a terrorist arm of the Afghan state nor did it conduct its activities on behalf of the Taliban. Rather, the group behaved much like a cult, acting upon its leader's premise that attacking the United States would force U.S. withdrawal from the Islamic world. Its members fanatically followed its leader without any objective measurement of his logic or effectiveness.

Osama bin Laden made no secret about his desire that al Qaeda serve as the vanguard for violent revolutionary movements in the Muslim world.³ Nonetheless, to take his ambition seriously would have grossly inflated the capacity of the organization and the credibility of his ideas. This challenge left Washington with little choice but to center its war machine on destroying al Qaeda's terrorist capabilities, which in turn led to the second paradox.

The counterterrorist agenda of the war on al Qaeda created the expectation that preventing the group from conducting terrorist operations against U.S. interests would be the critical indicator of the group's defeat. The problem with this premise is that it also created the logical argument that any al Qaeda terrorist operation would become an indicator of its victory. Neither is necessarily true. Preventing terrorism is a noble goal, but the tactic of terrorism will remain an easy-to-employ, violent method adopted by the few to obtain the immediate attention of the many. There will be no unconditional surrender by a tactic. Making terrorism prevention the objective of war increases the potential for an endless state of conflict, given that even a failed terrorist attempt reignites the battlefield.

Events over the past decade further illuminate this dilemma. American-led operations in Afghanistan crushed al Qaeda's leadership, reduced its ranks, and dislodged the group.⁴ Continued pressure has prevented the group from reconsolidating its presence and is close to destroying the entirety of the original leadership. The group survives only by living underground and on the move. Furthermore, persistent operations against incoming leaders have thinned the back-bench, leaving individuals with limited experience in charge.

While the United States might look at these developments as indicators of U.S. victory, al Qaeda likely does not view them as lasting signs of its defeat. According to

Gina M. Bennett wrote this essay while a student at the Marine Corps War College. It won the Strategy Article category of the 2013 Chairman of the Joint Chiefs of Staff Strategic Essay Competition.

personal accounts of his family, bin Laden prepared to live underground for long periods.⁵ He apparently anticipated that his actions would constrain his ability to operate in the open. The group's committed members believe time is on their side because as long as one man inspired by al Qaeda can pose a threat, the United States by its own definition cannot claim victory.⁶

In addition to inadvertently raising an expectation that every terrorist attack could be prevented, Washington's counterterrorism focus in its war on al Qaeda may have minimized other avenues for defeating the group, leading to a third paradox. Dismissing the credibility of bin Laden's vision of global insurgency unintentionally led to overlooking developments that were destroying the cohesion of the group and defeating its ideology.

The raid on bin Laden's safe house in Pakistan in 2011 included the capture of letters between bin Laden and his subordinates that provided a fuller picture of internal discord over al Qaeda strategy.⁷ These documents along with detailed accounts of bin Laden by Peter Bergen and Steve Coll offered a more comprehensive picture of his grand strategy and revealed the relatively minor role terrorism played in it.⁸

Bin Laden's vision of a global struggle appears to be a poorly applied interpretation of Maoist protracted warfare theory.⁹ His writings revealed that he made a priority of methodically organizing his followers and creating safe enclaves for jihadist rule for others to emulate. Over time, he grew to appreciate that his followers should not attack until they were in a position of strength against local security forces. Bin Laden's strategic focus, therefore, was on changing the balance of power between local Islamic militant groups and the regimes they sought to overthrow. Terrorist attacks against the United States were his preferred method for shifting that balance.

In his final years, bin Laden continually urged his leaders and affiliates to attack the American homeland rather than U.S. interests throughout the Muslim world. His letters strongly cautioned that striking American regional interests would only foster closer ties between Washington and the local regimes and justify an expanded U.S. role in the region.¹⁰ Furthermore, bin Laden warned that launching jihad against local governments before jihadists were unified would provoke

destructive infighting and risk significant Muslim bloodshed.

By the mid-2000s, al Qaeda members largely resisted bin Laden's direction to stay focused on the U.S. homeland.¹¹ Their severely constrained operating environment along with a hardened America may have deterred them from following his lead. Moreover, the group relaxed cumbersome bureaucratic requirements for establishing affiliates, which ultimately produced a substantial disconnect between bin Laden's emphasis on attacking the U.S. homeland and the preferences of the affiliates for attacks in their local areas of operation.¹²

Against this fuller understanding of the divide over strategy, the emergence of the "Arab Spring" may have played a more prominent role in driving al Qaeda toward defeat than was apparent at the outset. Just before his death, bin Laden cautioned that the Arab Spring could create the belief among Muslim populations that an Islamic revolution was possible without the expulsion of U.S. influence in the Middle East and without the use of violence.¹³ Both of those conditions would deeply discredit his theory.

The greatest challenge to the affiliate groups might be the emergence of popular political Islamic groups in transitioning Middle East nations that reject bin Laden's extreme version of Islamic rule while advocating a greater role for Islam in governance. In internal discussions, al Qaeda leaders have recognized that differences over Islamic jurisprudence between indigenous Islamic militants and al Qaeda in places such as Egypt, Libya, and Syria could be irreconcilable disputes that would prevent al Qaeda from making lasting inroads.¹⁴

This fuller picture of the divide that emerged over bin Laden's strategy reveals a fourth paradox. To follow his course of clandestinely organizing and exercising patience risks rendering the group's ideology irrelevant during the greatest modern-day period of revolution in the region. To maintain even minimal currency, the group must be engaged in action. But because al Qaeda rejects participation in political processes that it does not dictate, it leaves itself with few options for action other than terrorism. However, terrorist attacks provoke precisely the collaboration of regional players, popular opposition movements, and the United States that bin Laden feared as an existential threat to the organization. Because these groups are not following

his vision, their validity as an extension of the original al Qaeda—and the level of threat it once posed—is questionable.

Today, the world could conclude that regional affiliates are destroying the al Qaeda of bin Laden by choosing to adopt exactly the provocative, high-visibility strategy he counseled against. Alternately, a political party or candidate using the moniker al Qaeda could represent the final death blow to bin Laden's vision. Either way, changes in the Middle East may not lead to bin Laden's caliphate but could still produce a region of states whose governments include more Islamic rule than the previous set of autocrats. Furthermore, the threat of al Qaeda may be around for decades even while the group and its ideas continue to weaken, just as anarchists, fascists, Nazis, and other fringe groups whose vanguard leaders dominated the world's political and military agenda many decades ago continue to exist and inspire occasional tragedies. **JFQ**

NOTES

¹ "George W. Bush Speech to Congress," *CNN.com*, September 20, 2001, available at <<http://archives.cnn.com/2001/US/09/20/gen.bush.transcript/>>.

² Peter Bergen, "Time to Declare Victory: al-Qaeda is Defeated," *CNN.com*, June 27, 2012, available at <<http://security.blogs.cnn.com/2012/06/27/time-to-declare-victory-al-qaeda-is-defeated-opinion/>>.

³ Peter Bergen, *The Osama bin Laden I Know: An Oral History of al-Qaeda's Leader* (New York: Simon and Schuster, 2006).

⁴ Bergen, "Time to Declare Victory."

⁵ Najwa bin Laden, Omar bin Laden, and Jean Sasson, *Growing up bin Laden* (New York: St. Martin's Press, 2009), 123–144, 192–218.

⁶ "Bin Laden Calls Abdulmutallab a Hero," *Nairaland Forum*, January 25, 2010, available at <www.nairaland.com/387047/bin-laden-calls-abdulmutallab-hero>.

⁷ Harmony Program, *Letters from Abbottabad: Bin Laden Sidelined?* (West Point, NY: Combatting Terrorism Center, 2012).

⁸ Bergen, *Oral History*.

⁹ Mao Tse-Tung, "On Protracted War," lectures, Yen'an Association for the Study of the War of Resistance Against Japan, Peking, June 3, 1938.

¹⁰ *Letters from Abbottabad*, 19–21.

¹¹ *Ibid.*, 20.

¹² *Ibid.*, 9–12.

¹³ *Ibid.*, 48–50.

¹⁴ *Ibid.*, 18, 23.

Satellite uplink station deployed during Operation Desert Shield

U.S. Air Force (Kit Thompson)



Reconnaissance and Surveillance **Looking Deep**

By ROBERT W. CONE

The joint force cannot fight and win if it is blind. In any future contingency, success rests on a few first principles: find the enemy, maintain contact, and determine his intent. Such imperatives spell out clear requirements that any reconnaissance and surveillance (R&S) organization must meet to perform across the range of military operations.

As the insurgencies in Iraq and Afghanistan developed and tactical headquarters became increasingly static, organic U.S. Army R&S assets were reinforced by national resources. In fact, the Army was fortunate and had first priority on many of the Nation's strategic intelligence assets, such as those provided by the Defense Intelligence Agency, Central Intelligence Agency,

and National Reconnaissance Office. As long as the U.S. strategic focus remained on transnational terrorist threats, the Army could rely on these assets to fill most, if not all, of the gaps within its own R&S infrastructure. Moreover, Army investments in tactical R&S assets (for example, Shadow unmanned aerial systems or organic reconnaissance squadrons within Brigade Combat Teams [BCTs]) gave our tactical commanders—brigade level and below—unprecedented R&S capability.

As the U.S. presence in Afghanistan concludes and the strategic rebalancing toward the Asia-Pacific region gathers momentum, the Army will no longer have first call on the Nation's strategic R&S capacity. As a result, much of the capability provided by national resources is returning its focus to providing accurate analyses of adversaries' strategic intent. Fortunately, the Army's investment in tactical R&S

assets ensures its ability to see and act on the close-in battlefield will persist. But the loss of these strategic assets, coupled with the inherent limitations of tactical assets, has left a huge operational-level gap in the Army's ability to contribute R&S capabilities at echelons above brigade. In any future conflict or contingency, Army and joint force operational commanders will find that they lack the ability to see beyond the tactical horizon, making it nearly impossible to determine enemy intent and counter it in a timely manner. Such blindness establishes conditions for battlefield surprise and risks defeat for U.S. forces.

In the past, the Army's contribution for operational-level R&S was provided by its Armored Cavalry Regiment (ACR). In the scenarios that we were likely to encounter during the Cold War, we found that the ACR was a nearly perfect tool. Unfortunately, the optimization of the ACR for a

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particular environment meant that it lacked the adaptability to meet many of the R&S challenges manifesting themselves across the current range of military operations. To meet these varied challenges, the Army built the Battlefield Surveillance Brigade (BfSB). Though these units proved highly effective in Iraq and Afghanistan, it is increasingly obvious that they are not robust enough to “fight for intent” and survive on the future battlefield, particularly in close contact with the enemy. Just as crucially, the BfSB, as well as other smaller maneuver R&S formations, lack the intelligence fusion and analysis capability that senior operational commanders require. As a result, the Army is making a new appraisal of the R&S capabilities required to support campaigns at echelons above brigade, as well as how to obtain them during a prolonged period of austerity.

Purpose

The *raison d'être* of an operational-level R&S organization is fighting for intent. This idea goes far beyond just gaining and maintaining contact, which any tactically proficient maneuver unit can accomplish. Rather, it entails looking over the horizon not only to see an enemy's dispositions and activities, but also to interpret them. Although R&S missions will often result in contact and engagement with the enemy, fighting for information remains secondary to seeing the entire battlefield and then taking the resulting huge flow of data and turning it into a useful product that allows us to ascertain the enemy's intent.

Operational-level R&S organizations thus require the capability to make sense of what they collect. Our collection capabilities already provide more data than our headquarters and commanders can make sense of or use effectively. Such massive amounts of data are useless if they cannot be placed within the context of the mission and environment. Consequently, operational-level R&S organizations must be capable of providing at least an initial level of analysis that meets the needs of multiple supported headquarters simultaneously. Therefore, they need to have the technical resources and trained personnel to allow for the discovery of enemy intent, as well as to spot patterns, trends, and discontinuities. In short, operational-level R&S organizations require sufficient analytical capability to turn huge volumes of *data* into useful *infor-*

mation that commanders can take action on. Moreover, these organizations must provide this information with enough timeliness to get commanders inside the enemy's decision cycles—at the ever-quicken pace of

A commander will only be able to concentrate his forces if he can look into these areas and maintain the awareness and influence to prevent surprise and manage risk. This task will fall to Army R&S organizations that

reconnaissance and surveillance allow the commander to shape the future battlefield to give U.S. forces the best chance of success

battle. This capability gives R&S units the ability to integrate intelligence and operations, thereby enabling intelligence-driven activities within commands.

The conflicts in Iraq and Afghanistan have clearly demonstrated the tremendous power of this approach. By underpinning campaigns with fused intelligence analysis, the Army was able to adapt in order to defeat a versatile and changing enemy, and did so with a degree of precision previously unknown in warfare. Moreover, our intelligence dominance enabled commanders to anticipate the enemy, seize the initiative, and mitigate risk across the environment.

Finally, since the joint force will function anywhere along the range of military operations, R&S organizations must be capable of gaining information in a large number of different situations. Some situations will be low threat, but in some cases, the organization will have to fight for information. We can say with certainty that R&S organizations require sophisticated organic intelligence capability and some degree of combat-support capability. (The question is how much combat capability should be organic to the organization.)

R&S and a Smaller Army

Few doubt that the Army will soon find itself substantially smaller than it is today. Whether we have 32 or 45 BCTs available, the American people still expect the Army to be ready for any contingency and to emerge victorious from any conflict. Doing so requires mitigating the operational and strategic risks that a smaller force entails. Effective R&S is essential to that effort.

On the battlefield, a commander must be able to concentrate effects to counter an enemy move or achieve desired purpose. In a smaller Army, any such concentration means other sectors—many of them important—will, of necessity, be denuded of forces.

require the capability to sustain themselves in prolonged combat situations. In fact, the necessity for a new operational-level R&S formation is specifically due to the current BfSB's inability to maneuver and conduct combat operations throughout the depth of the battlefield.

But an operational-level R&S organization cannot be limited to fulfilling Army needs. In almost all future engagements, the Army will find itself as part of a joint force, and likely a multinational one, and may be called upon to provide R&S capabilities to a joint task force commander. Accordingly, any future operational-level R&S organization must possess the capabilities necessary for plugging into a joint headquarters. That support could range from serving as the R&S organization for the joint force to providing niche capabilities that can work directly for headquarters.

Regional alignment can create a strong reinforcing relationship here. An operational-level R&S organization, with greater depth of intelligence capabilities as well as combat forces that can support partnered activities, is almost ideal for training, advisory, and assistance missions. The organization's intelligence capability allows it to maintain a much deeper understanding of the environment than traditional brigades. That focus allows it to rapidly prepare units to operate in the environment. Furthermore, the close relationship between combat battalions and the intelligence organizations should lead to better prepared units. Indeed, with regional alignment, these units' deep knowledge and unique sets of skills make them desirable for the early phases of many scenarios that combatant commanders face.

Reconnaissance and surveillance allow the commander to shape the future battlefield to give U.S. forces the best chance of success. Such shaping is impossible unless operational commanders can see what is



U.S. Army (Phil Kernisan)

Battlefield Surveillance Brigade Soldiers speak with members of Afghan Border Police near Ulagay, Kandahar Province

coming at them with enough clarity to determine the enemy's intent. That requires combat power, which allows R&S organizations to fight for information, protect widely dispersed assets in lower intensity operations, and support the regional partnership activities that provide insight only gained by physical proximity. Some combat power can be tailored based upon mission requirements, but clearly the operational-level R&S organization needs more organic combat power than the current BfSB.

Solutions

What is clear is that the Army needs to provide the joint force an R&S organization that is *tailorable*. In some instances, the formation will need a great deal of combat power; in other cases, analytical capability will be central. Many missions will require a unique blend of specialized capabilities. The power in this formation will stem from its mission-specific adaptability. Unfortunately, an Army of 32 BCTs cannot afford to create new specialty formations. There simply is no latitude within the future force structure to build the modern-day equivalent of the Armored Cavalry Regiment. Worse, when a future conflict does erupt, the possibility of building effective operational-level R&S units on the fly by simply drawing in pieces of other units into an ad hoc formation is, at best, doubtful.

The requirements discussed, however, do seem to point to a BCT-based solution. BCTs have the right combat power and a

robust staff. If these BCTs are augmented—perhaps built around a Military Intelligence Battalion—they possess the inherent adaptability to meet the majority of R&S requirements. Based upon specific missions, they can receive additional units—such as chemical, fires, or aviation, when necessary—and possess the seniority of leadership to work directly for a joint force commander.

Two possible solutions have emerged in discussions. First, several current BCTs can be given a permanent on-order mission to assume operational-level R&S tasks. These BCTs would be augmented with additional resources and capabilities, particularly for the conduct of battlefield analytics. They would live together and build the habitual relationships that historically improve cooperation between units. Moreover, they would have adjusted training and leader development plans to ensure they maintain a specific minimum capability to conduct operational-level R&S missions.

The second possibility is to assign this mission, as necessary, to any available BCT and then build R&S capabilities into that unit during the Army Force Generation process. The Army would keep stores of up-to-date equipment on hand and plug it into the units as soon as they enter the process. Beyond the necessary equipment stores, the Army will have to invest in maintaining cadres of specialty personnel that can either plug into the selected BCT, or rapidly train that BCT in R&S tasks. By extension, this means the Army will keep on hand the rel-

evant doctrine and training material necessary to ease the organizational transition.

These findings are informative, but not comprehensive. There are fiscal and force structure realities that must be considered, too, and the ideal solution may not be affordable. Both solutions merit further examination through analysis, experimentation, and testing. The Maneuver Center of Excellence, in conjunction with the U.S. Army Training and Doctrine Command Analysis Center, is running a series of simulations and exercises to test both concepts thoroughly, and eventually we must test these ideas “in the dirt.”

A dangerous reconnaissance and surveillance gap is developing between what the joint force requires in the future and what the Army is likely to have available. If we are to succeed against the many dynamic and dangerous threats already rising in an increasingly chaotic global environment, seeing beyond the horizon and determining enemy intent will be critical. Moreover, as strategic R&S assets are redeployed to address other priorities, it is incumbent on the Army to replace these capabilities within its own structure. Unfortunately, given the austere economic situation, there are no easy answers. We can no longer solve problems by throwing money at them and building new resources. However, we can optimize existing organizations to ensure our commanders have the right mix of forces to prevent, shape, and, when necessary, win on any future battlefield. **JFQ**



RQ-4 Global Hawk was designed for intelligence, surveillance, and reconnaissance

ISR Support to Operational Access

Winning Initiative in Antiaccess and Area-denial Environments

By ANDREW ROBERT MARVIN

When General Martin Dempsey released the Joint Operational Access Concept (JOAC) in January 2012, it represented a strategic shift within the Department of Defense (DOD) following more than a decade of focus on irregular warfare in Iraq and Afghanistan. In the JOAC, General Dempsey called for the development of

strong solutions to counter enemy efforts to deny the U.S. military both the ability to reach a joint operational area (antiaccess) and, once it has reached that area, its ability to freely maneuver toward an objective (area denial). Together, these antiaccess/area-denial (A2/AD) tactics represent a substantial threat to the current American way of war, which is characterized by long buildups, sizable logistics footprints, and

unhindered access to intelligence, surveillance, and reconnaissance (ISR).

Execution of A2/AD against U.S. forces assumes the enemy successfully employs advanced conventional weapons and cyber capabilities, some relatively novel and some familiar to planners. Potential foes have many weapons, but their plans will hinge on just a few of them. These few weapons will form the enemy's high-value target (HVT) list. American ISR must focus on finding these HVTs fast enough and far enough away from a joint task force (JTF) to allow for their successful targeting and destruction.

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Remains of Iraqi Scud missile shot down by MIM-104 Patriot tactical air defense missile outside of Riyadh during Operation Desert Storm

The thinking about ISR employment in an A2/AD environment is not mature. The JOAC spends only a few paragraphs out of 70 pages on intelligence. Other valuable works on A2/AD, such as Mark Gunzinger and Christopher Dougherty's valuable description of possible operations in the Persian Gulf,¹ discuss maneuver more than intelligence. DOD leadership must ensure that ISR and processing, exploitation, and dissemination (PED) capabilities properly support and map to an operational access campaign or the concept will fail. This success must start with more thinking and debate on intelligence missions in A2/AD environments.

The intelligence function's task in an operational access campaign will be tough. Not only must intelligence find HVTs central to A2/AD, but it must do that in a high-threat environment where ISR assets can be destroyed or spoofed. Assuming a collection platform succeeds and actually survives long enough to exfiltrate its data, analysts must then produce and disseminate all-source intelligence rapidly enough for friendly firepower, which is also vulnerable to A2/AD assets, to use it. The intelligence function must juggle these tasks as well as traditional responsibilities such as intelligence preparation of the operational environment, situational awareness, and counterintelligence. To make matters more challenging, a JTF executing an operational access campaign could face competition for scarce intelligence collection and production assets from other contingency operations as

well as demands from political leaders who need to stay abreast of the situation. During Operation *Odyssey Dawn*, the Air Force's only Joint Surveillance Target Attack Radar System unit was already committed to flights in Afghanistan when it was called to provide aircraft and crews to support operations in Libya, putting additional stress on an already heavily used capability.²

This article proposes a framework for analyzing intelligence support, and ISR in particular, in support of the JOAC. While the intelligence mission is universal—to drive operations through the provision of actionable information to commanders—its tools are not. What worked in Afghanistan, or even in Libya, might not work in a future operational access campaign. By thinking about operational access theory, we can imagine exactly what we want ISR to do, freeing ourselves (just enough) from past paradigms, doctrine, field manuals, and joint staff acquisition processes that are either overprescriptive or unhelpfully vague when applied to future problems. Finally, in addition to putting forward the *attributes* of good operational access ISR (the *what* in these future campaigns), this article seeks to contribute to the *how* side of the equation by offering methods to assess and measure the size and composition of a future intelligence warfighting function.

The Future Battlefield

When Operation *Iraqi Freedom* transitioned from invasion to counterinsurgency,

it took several rotations for ISR capabilities to adjust from tracking Republican Guard divisions to finding insurgent high-value individuals (HVIs). While not all A2/AD threats are as elusive as HVIs, there is reason to believe they will challenge existing ISR capabilities. In the JOAC, air defense tops the list of potential aerial-denial threats. Integrated air defense systems (IADS) are largely static, relying on large radar sets, ground control intercept stations, and large surface-to-air missiles (SAMs) that are difficult to move. Some of these assets can be identified and plotted preconflict. For instance, a SAM battery defending a key airfield is unlikely to move once detected. The United States made short work of air defenses in Iraq and Libya during recent conflicts, yet these nations had antiquated IADS. Newer SAMs, even long-range missiles such as the Russian S-400, are more mobile than the decades-old SA-5s fielded by Libya.

Also, mobile systems that combine transporter, erector, launcher, and radar (TELAR) into one vehicle have grown more sophisticated. Mobile SAMs can operate autonomously or take cues from surviving target acquisition or even civil air control radar. If not initially destroyed in garrison, these weapons can become a persistent threat to U.S. aircraft, preventing the deployment of slower aircraft such as unmanned aerial systems (UASs) and AC-130 gunships, while forcing jets to operate at higher altitudes. If U.S. ground forces are engaged, such systems can pose a significant threat to aircraft performing the demanding close air support mission.

Surface-to-surface missiles (SSMs) with ranges in excess of 1,000 nautical miles pose a serious antiaccess threat under the terms of the JOAC. Potential SSM threats can follow either cruise or ballistic trajectories and can be launched from land, sea, or air. Even with conventional warheads, these weapons can threaten the staging areas needed for a campaign. Given proper targeting (including fully autonomous terminal stages), high speed, and sizable warheads, such weapons can even threaten U.S. carriers. Truck-mounted missiles or transporter erector launchers (TELs) can provide this missile the same capability to hide, launch, and disappear ("shoot and scoot") that modern SAM TELARs possess.

America's record in countering mobile SSMs is mixed. Iraqi Scuds were high prior-

ity targets during Operation *Desert Storm*. To find them, the coalition scoured potential launch areas with both special operations forces (SOF) and tactical aircraft loitering over kill boxes. These efforts likely had some impact. Scud attacks declined from 4.3 per day during the war's first week to 1.5 per day thereafter, but evidence suggests the coalition actually destroyed few TELs but many decoys.³ After the war, Saddam Hussein still had a sizable Scud force to declare to United Nations weapons inspectors.

While ISR has improved significantly since 1991, experience in Libya and Iraq indicates that killing fleeting targets is still difficult. During the 2008 battle for Sadr City, rocket attacks launched by Iraqi insurgents proved so difficult to interdict that ground forces resorted to walling off sections of the city to prevent further attacks. Future foes may take their cues from Sadr City's rocket teams and hide their TELs in complex terrain instead of the flat environs of Anbar Province. Enemy IADS and air forces will likely be tougher as well. Under existing ISR regimes, search and strike sorties dedicated to neutralize these potent weapons would be sorely missed as a range of other A2/AD threats engages U.S. forces.

Intelligence Fundamentals for JOAC

The JOAC's response to evolving IADS, SSM, and other A2/AD threats is to count on increased cross-domain synergy of U.S. warfighting capabilities in order to gain a temporary exploitable advantage over the enemy—a swift effort to open the portal wide enough to allow victory. The JOAC calls for combat power both applied directly against enemy A2/AD threats and employed across great distances by way of a hardened long-distance supply chain.

While cross-domain synergy implies a variety of shooters (emerging capabilities may, for instance, allow SOF, submarines, or cyber assets to effectively neutralize an enemy IADS), the task and purpose are clear: enemy A2/AD assets need to go down long enough to support maneuver against an objective. This hard requirement creates two intelligence missions: effective search and actionable fusion.

Effective search refers to the collection of A2/AD asset signatures to support targeting by available firepower or soft-kill capabilities. While a range of sensors from imagery to human intelligence may detect a given A2/

AD asset, any sensor must meet certain criteria to be effective. These criteria are access, capacity, resolution, and persistence.

Access equates to a sensor's effective reach. A high-gain receiver may be able to detect certain signals from hundreds of miles away, while a SOF surveillance team's range may be limited to line of sight and thermal imager resolution. Given the consequences of being ranged by U.S. firepower, future enemies are likely to devote significant combat power to counter reconnaissance and destroy American ISR assets. Mines can keep submarines at bay, and aggressive rear area security can neutralize SOF strategic reconnaissance efforts. SAMs might not be the only threat to air-breathing ISR assets. The Russians have designed air-to-air missiles such as the R-37 and R-172 with ranges in excess of 100 nautical miles. These "AWACS killers" could threaten U.S. ISR assets, keeping airborne sensors away from a battlefield and reducing their access. We speak of access as effective reach because range is not the only way to gain access. American ISR assets can also evade enemy counter-reconnaissance by methods such as survivability (operating from a platform that can absorb or evade enemy punishment) and clandestine emplacement (an unseen SOF team or a stealth platform).

Capacity refers to the amount of data a sensor can gather and process. For imagery sensors, this might be expressed in gigapixels, or square meters. For signals efforts, the number of channels monitored might be a relevant metric. Capacity is critical because of the familiar "empty battlefield" effect brought on by increasing weapon lethality. Between World War I and the 1973 Yom Kippur War, battlefield density decreased by a factor of 16.⁴ Historian Trevor Dupuy measured 40,000 meters of battlefield per soldier in the latter conflict. This trend will likely continue in A2/AD conflicts. Longer range IADS and tactical missiles can attack from far off, thereby defeating U.S. ISR access in a linear fashion—weapons push away from a sensor kilometer by kilometer. Range is even harsher in its effect on capacity, however. As a weapon's effective range doubles (as the SA-17 doubled the range of the legacy SA-6 SAM), its potential hiding space on the battlefield quadruples. This fact might drive the United States to adopt ISR assets that can rapidly collect over a large area (whether geographic or electromagnetic).

Resolution refers to the ability to distinguish target signature from background noise. Research into HVI targeting in Iraq and Afghanistan found three critical elements of resolution: identity, geospatial, and temporal. *Identity* resolution shows what a target is—a church versus a barracks, a civilian versus an enemy agent. For fixed sites, identity resolution may be sufficient for targeting since imagery methods of geolocation are well refined and facilities do not change rapidly. For a runway, it is probably sufficient to see if it is still present a few days before a missile strike. Mobile targets such as HVIs and TELARs need good geospatial and temporal resolution. *Geospatial* resolution tells exactly where a target is (in a particular county or at a particular street corner). *Temporal* resolution lets us know when the other two attributes have been detected. This could be hours or minutes ago. Closer is better, of course, but weapon capabilities and dynamic targeting procedures would determine specifically how accurate ISR resolution must be.

Persistence refers to the length of time a sensor can collect data. Sensors with high persistence can access the battlefield for a long time. If a sensor was fast and had an infinite *capacity* (that is, it could collect on the entire battlefield at once) and exquisite resolution, it would not need persistence—all relevant HVTs would become visible at a scan of the sensor. Of course, no such sensor exists, and current systems need to invest time scanning the battlefield either searching for a particular HVT or stalking an existing one, waiting for its signature to change. In the stalk mode, a signals intelligence aircraft can wait for an enemy radio net to activate or a UAS can wait for an HVI to depart a safe house, opening the opportunity for a strike.

We have already shown that key A2/AD threats (such as mobile SAMs and SSMs) possess both low signature and high mobility. Finding a static, nonemitting TEL on a battlefield is a tall order. Missile launch may give sensors better detection odds, but ISR's goals should be predictive (or "left of the plume"), not a forensic examination of a successful enemy attack.

Effective search is the toughest problem facing intelligence support to the JOAC. Its success is tied to precious sensors that must effectively balance multiple dimensions. Search must be coordinated

with (and occasionally compete against) other military activities, and their ISR platforms must survive enemy efforts to thwart sensor access by destruction, denial, or deception. Still, effective search is not sufficient for intelligence success; actionable fusion must take place to ensure collected intelligence delivers value to an end user—usually a commander or a shooter—who is responsible for delivering firepower via land, sea, air, or cyber platform.

In existing intelligence doctrine, collection ostensibly delivers lists of answers to questions written in the form of priority intelligence requirements. Commanders allegedly write these requirements and then consume and synthesize collected intelligence to make decisions regarding the course of the battle. In actuality, intelligence staff officers usually write up requirements,

the application of lethal fires. To the greatest extent possible, its elements should not be simulated, and national agencies expected to support an intelligence effort during war should be present in training. Likewise, the analysis and PED feeding actionable fusion should not be a pickup game of individual augmentees and hastily assigned reachback analysts. Commanders and intelligence professionals should work out the people, processes, and technology beforehand given what we know about past experience and potential future combat scenarios.

Implications

As we evolve the operational access concept in response to A2/AD threats, we need to size the force to ensure that the Armed Forces and combat support agencies have the proper tools in the numbers

and PED support to JTFs can be wildly off the mark. Operation *Iraqi Freedom* began in 2003 and was supported mainly by Air Force Predator UASs that were augmented by a handful of short endurance, low-resolution UASs operated by the Army. By 2008, the UAS presence on the battlefield had grown by a factor of 25.³ Human intelligence (HUMINT) capabilities expanded rapidly as well. At the start of *Iraqi Freedom*, brigades fielded one small HUMINT team each. By 2008, it was not uncommon for battalions to have two teams apiece, sourced both from the brigade's organic military intelligence company and augmentees from general support military intelligence or battlefield surveillance brigades. At the Army's intelligence center at Fort Huachuca, Arizona, a forest of buildings rose from the desert to train newly minted HUMINT specialists. Hastily hired contract instructors augmented the Active-duty cadre at the fort and made this training surge possible.

There are similar stories for signals intelligence and analytic efforts. A common explanation for this disconnect was that U.S. land forces had prepared to fight a mechanized foe that was easy to find but hard to kill. In Iraq (and Afghanistan), these forces instead faced an irregular threat of insurgents who were unable to hold ground against overwhelming American firepower, yet they were devilishly difficult to find.

ISR capabilities present at the outset of Operation *Iraqi Freedom* were largely determined by two methods: subject matter expert (SME) assessment, where a group of experienced professionals gives its experienced opinion on matters, and modeling and simulations (M&S), a largely computerized process of wargaming possible scenarios. Both have their place as assessment tools. SMEs can deliver answers quickly and leverage large amounts of personal experience. M&S can deliver detailed answers to concrete questions, such as the outcome of battles between mechanized units. Both have shortcomings when applied to ISR force-sizing.

SME input is critical to any assessment. As a standalone capability, subject matter expert results are quick and usually trusted. Very good M&S include input and validation from SMEs, particularly when exact measurements of a modeled attribute are not available. Another sizing method called operations assessment also requires either

as a standalone capability, subject matter expert results are quick and usually trusted

which are often not synchronized with adjacent echelons. Additionally, shooters are likely to be even more voracious consumers of intelligence than their commanders. They are more numerous, of course, and hold the responsibility to actually execute the commander's plan by fighting and defeating the enemy. The intelligence that these shooters need may be highly perishable—a ballistic missile TEL may be set up for less than 30 minutes before it shoots from a presurveyed location. Aggressive time selection standards will demand fast actionable fusion that aids the shooter in finding and killing its target. The end result of actionable fusion is not a detailed briefing. It is a smoking crater.

In this scenario, intelligence analysts and the processing, exploitation, and dissemination infrastructure must work relentlessly on reducing the sensor-shooter link to meet tough dynamic targeting standards. Actionable fusion requires deliberate placement of each communications link, storage system, dissemination path, and approval mechanism that touches collected data. In an A2/AD scenario, the JTF intelligence function can neither pass erroneous information to a shooter nor let a fleeting target slip through the cracks. Intelligence support to time-sensitive targeting must be a battle drill practiced as rigorously and regularly as

needed to defeat these threats. As we have seen, the ISR stakes are high in any A2/AD scenario due to the speed at which an enemy can deliver firepower and the vulnerable concentrations (for example, ships, airfields, and forward operating bases) U.S. forces will present on the battlefield. For combat units and logistics, there is a great deal of back-ground to assist in force-sizing. A mechanized infantry battalion can nominally cover four kilometers of frontage in the defense, and fighter wings and carrier groups can hit a certain number of targets per day depending on distance, munitions, and tankers available. The logistics community can plan using consumption rates for fuel, food, and munitions under certain circumstances. Even if these planning factors are somewhat off the mark, they give a solid starting point for planners thinking about future forces. Sizing ISR is more problematic. The Intelligence Community has fewer rules of thumb, and much systemic intelligence data are classified and hard to access. ISR application is not formulaic; 25 gallons of diesel may fill up a Humvee, and 18 standard pallets may fit on a C-17, but there is no equivalent solution that x number of ISR hours will detect an SSM in a wooded environment.

The result of poor forecasting techniques and a dearth of hard data is that ISR

SME input or direct observation to build understanding and gain expertise. However, SMEs are not perfect. For instance, they are highly subjective to “success story” bias. When interviewed, operators and intelligence professionals tend to amplify the importance of a given ISR or PED capability if they have seen it succeed once or have viewed a success story vignette, often on a PowerPoint slide. These vignettes may not be representative of an ISR asset’s performance, but because they often create a compelling narrative, they can be powerful platforms to drive the adoption and proliferation of certain capabilities. Additionally, context matters. Two brigade commanders interviewed regarding their tenures in Afghanistan gave different answers when asked to gauge the effectiveness of ground moving target indicator (GMTI) support. Success bias might affect these differences, as might incompetent (or particularly skilled) intelligence analysts. Finally, one unit could have gotten better results because its terrain is better suited for GMTI collection. None of these factors automatically invalidates SME input, but they demonstrate that it may not stand alone without follow-on analysis.

M&S are often touted as good capabilities to show future performance because they can be predictive. Indeed, when one has a great deal of data on a discrete situation (so many friendly tanks, so many rounds of ammunition, and so many opposition tanks), M&S can deliver some good answers. Unfortunately, ISR does not often present convenient factors such as coverage areas or consumption rates. Signal propagation rates may vary significantly depending on time of day, antenna placement, and aircraft altitude. Factors such as zoom and altitude also affect full-motion video area and resolution. Skill and experience are significant drivers of a sensor operator’s ability to track a given target. Simulating such an environment relies on serial assumptions that dramatically reduce the chances of producing valid results. On the PED side, matters are even worse. M&S cannot hope to replicate factors that drive successful targeting, such as complex intelligence reporting (much of which is narrative) or the variance in quality among intelligence analysts. If one does attempt to account for these variances, inaccuracies can compound, skewing the results. As one study noted, applying M&S to intelligence employment is inherently challenging

“because the generated results are often built on multiple nested and tenuous assumptions and approximations.”⁶

Operations Assessment

For sizing ISR in support of the JOAC, an operations research technique known as operations assessment will likely outperform SME- or M&S-driven approaches. If appropriately employed alongside traditional sizing methods, it may yield results that are “less wrong” in the highly ambiguous world of forecasting ISR needs. Operations assessments start with developing a deep understanding of a unit’s wartime mission and the operation of the ISR and PED assets that usually support them. SME input or direct observation is therefore important in the first stage of operations assessment, but rather than using this input as an endpoint for a staff briefing or position paper, operations assessments treat SME input as hypotheses to be tested with systemic data. This methodology proved successful in determining the key elements of HVI hunting in Iraq and Afghanistan and, later, the best way to kill indirect fire teams in Sadr City. In 2007, the Office of the Secretary of Defense hired a group of consultants to measure the performance of ISR and PED in supporting specific missions by examining key mission drivers (often determined through SME interviews and input) and substantial quantitative analysis. By reviewing thousands of storyboards, significant activities, intelligence reports, and sensor data records, the assessment team determined key drivers of success that led to several force-sizing decisions.⁷

Of course, while we have terabytes of operations and intelligence data from Iraq and Afghanistan, we are not currently fighting any countries that pose A2/AD threats. This does not invalidate the operations assessment approach, however. Certain elements of information will generalize. Some intelligence activities go on year round whether we are at war or peace. Measurement of those activities in peacetime, and the performance of key PED and ISR systems, could give insight into how they would perform in a shooting war against an enemy trying to destroy or spoof U.S. sensors. We do not know the performance of every IADS in the world, but we do have recent knowledge of how Libyan IADS reacted to U.S. forces and how successful our

attacks, assessments, and followup strikes were. By the same token, we have never fought in many cities in the world, but we know how our sensors perform in urban environments and can extrapolate that to other urban areas.

SME input and M&S may play a part in these future operations assessments, but a brute force effort to model priority intelligence requirements and list critical attributes needed for the JOAC strategy will be doomed to failure. The terrain and domains, as the JOAC paper alludes, are simply too complex. The ISR focus for this threat should be informed by experts, driven by hypotheses, and supported by quantitative data. Such an effort, geared around the simple question of how we find and kill high-value targets in an A2/AD environment, would most likely yield answers, or at least candidates for more rigorous exploration. **JFQ**

NOTES

¹ Mark Gunzinger and Christopher Dougherty, *Outside-In: Operating from Range to Defeat Iran’s Anti-Access and Area-Denial Threats* (Washington, DC: Center for Strategic and Budgetary Assessments, January 2012), available at <www.csbaonline.org/publications/2012/01/outside-in-operating-from-range-to-defeat-irans-anti-access-and-area-denial-threats/>.

² Gene Rector, “Joint STARS now supporting Libyan operations,” *The Warner Robins Patriot*, March 25, 2011, available at <http://warnerrobinspatriot.com/view/full_story/12495900/article-Joint-STARS-now-supporting-Libyan-operations>.

³ William Rosenau, *Special Operations Forces and Elusive Enemy Ground Targets: Lessons from Vietnam and the Persian Gulf War* (Santa Monica, CA: RAND, 2001), available at <www.rand.org/pubs/monograph_reports/MR1408>.

⁴ Trevor N. Dupuy, *The Evolution of Weapons and Warfare* (Indianapolis: Bobbs-Merrill, 1980), 307.

⁵ Robert M. Gates, Remarks to Air War College, Montgomery, AL, April 21, 2008, available at <www.defense.gov/speeches/speech.aspx?speechid=1231>.

⁶ Frank B. Strickland and Chris Whitlock, *Assessing the Value of Intelligence: Lessons for Leaders* (Washington, DC: IBM Center for the Business of Government, 2011), available at <www.businessofgovernment.org/report/assessing-value-intelligence-lessons-leaders>.

⁷ Ibid.

President with U.S. defense leaders discusses new defense strategy during Pentagon briefing



DOD (D. Myles Cullen)

The Whole House of Strategy

When it grew too hot for dreamless dozing, I picked up my tangle again, and went on ravelling it out, considering now the whole house of war in its structural aspect which was strategy, in its arrangements which were tactics, and in the sentiment to its inhabitants which was psychology; for my personal duty was command, and the commander, like the master architect, was responsible for all.

—T.E. Lawrence

Seven Pillars of Wisdom: A Triumph

By COLIN S. GRAY

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The world is awash with political and strategic advice purporting to be remedies for current and anticipated ills. Rather less abundant are works that seek to render thought about strategic problems more robust. To that end, I examine strategic phenomena from five perspectives, each of which is seriously undertheorized for the explanation necessary as a basis for understanding. My chosen five are concepts, ethics, culture, geography, and technology. Despite the familiar character of these perspectives and their intrinsic significances, comprehension

of their meanings for strategy in general and for their relative importance in particular historical cases is seriously weak. Lawrence sees a whole house of war, which I adapt as a whole house of strategy.

It is ironic, not paradoxical, to argue for a holistic understanding of strategy and to lay emphasis upon a general theory whose tenets unite the field, while also emphasizing the need to explore the single subject of strategy from different perspectives. The contradiction between unity and division is only apparent because it is the robust inclusivity of the general theory of strategy that enables

particular perspectives to be explored safely. When the general theory is regarded properly as being conceptually sovereign, the danger is greatly reduced that strategic practice will be in thrall to some reductionist views (for example, strategy regarded as applied intellect, morality, culture, geography, or technology). It is only possible to allow the distinctive perspectives on the whole house of strategy their due when that edifice is standing whole and well constructed.

There is no correct number of perspectives in which strategy can be viewed. As a social scientist, I am intellectually comfortable with a subject that does not yield to research and analysis in quest of a Higgs boson—like most fundamental particle of truth. As a fairly devout Clausewitzian, I would like to claim that politics is the God particle for strategy, but such an assertion could not be entirely satisfactory. When one starts down the path of fundamental enquiry into causality, there, is unlikely to be a happy epiphany because the journey can have no attainable end. Behind and fueling politics is human nature, but a nature that probably requires contextual placement to be translatable for a meaningful perspective on strategy. For illustration, it can be difficult to come to grips analytically with moral and other authority. As context always itself must have context, so moral authority can only derive in its turn from yet higher moral authority, and so on, rather unhelpfully for useful understanding.

Unlike strategy's general theory, which should by definition be complete, if ever unfinished, perspectives on strategy can always be augmented or reduced according to intellectual taste and fashion concerning desirable inclusivity and exclusivity. Scholarly mission creep is an enduring danger. To explain, studies of World War II respectively in conceptual, moral, cultural, geographical, or technological perspective may slip the leash of conceptual and empirical discipline and "go native" by producing a moral, or cultural history of the war. The partial perspective intentionally privileged from the outset is, in effect, hard to prevent from swallowing the rest. This is a familiar malady.

In his command performance, the strategist strives to cope well enough with multilayered complexity. Each perspective always is in play and has some relevance. This can be frustrating to the scholar who unwisely seeks a measure of certain under-

standing that history, let alone contemporary or future contexts, cannot provide, no matter how elegant the equations or how powerful the data analyzing machines may be. Notwithstanding claims to the contrary, it is not accurate to conceive of strategic studies as a scholarly discipline. Particularly unhelpful are efforts to maintain the "stovepipes" of alleged purity for historical, social scientific, or hard physical scientific methodologies. Social science without history can be likened to driving in the dark without a rear-view mirror to reveal whence you have come and what is behind you (and may well still be with you).¹ History with little or no social science worthy of the name is likely to teeter on the brink of explanation that under-reaches in the meaning to events it can supply. Indeed, so powerfully can the contextuality of history impose a respect for (yesterday's) presentism that the historian is likely to be unable to answer, if he even understands, the social scientific strategist's question, "So what?"

The Theory of Strategy: Coping with Complexity

While the general theory of strategy educates about the permanent structure and functioning of the whole of its subject, it aspires to achieve no more than that. The theory educates its students to help enable them to cope with the specific strategic challenges of their day. There is need to capture two realities: that of a united subject, but also that of a subject manifesting itself in ever-changing forms. The architectural endurance of the whole house of strategy might mislead the unwary into believing that the weight of relative influence of the perspectives either is permanent or is equal among them all. In historical practice, every perspective yields a contributing subnarrative to the gestalt that is the grand narrative of strategy. But those subnarratives, confusingly interdependent though they are, reveal a course of events and suggest an explanation wherein some factors would seem to carry more weight than others.

Whereas, on the one hand, strategy is difficult to do well enough because of the complexity of its domain, on the other hand, that complexity provides options to help work around problems. The challenge to clarity of understanding posed by the complexity of the whole house of strategy is easily illustrated. Wherever one looks in strategic

history, the competition for pole position as most significant perspective is apt to be intense; if it is not, the reason probably is because scholars have not examined the case in sufficient width, depth, and context.²

For any strategic historical case, there will be human decisionmakers behaving with variable discretion in a context of political, bureaucratic, cultural, moral, and other contexts. Histories that favor the conceptual, the ethical, or the geographical perspective, *inter alia*, can hardly help but give an unbalanced interpretation of events. Yet each perspective is in some measure true. The general theory of strategy should be able to advise on what to look for, but it can never be mobilized itself to explain how the perspectives it accommodates should be rank-ordered for their relative potency. Geography (distance, terrain, weather) usually explains a lot, but the specific reasons why it is relevant to historical strategies have to be sought in human personality, circumstance, and beliefs.

The attractions of monocausality ("strategy is really all about . . .") are as obvious and substantial as they are lethal to balanced understanding. Nonetheless, the scholar would be well advised not to be so tolerant in his recognition of complexity and multicausality that meaningful explanation is impossible. One can adapt Gresham's Law—that bad money tends to drive out good—to read that a proliferation of strategic explanations with lower value tends to obscure and diminish the worth attached to explanations with higher value. Although all coins in circulation have some value, the fact that those of lower worth circulate more rapidly—Gresham's point—should not be allowed to obscure the intrinsic worth of higher denomination coins. To convert this illustration: although strategic history is a drama played by a cast comprising the subjects of every perspective, however organized conceptually by category, at most times, in most places, and in most circumstances, some perspectives, perhaps just one or two such, can plausibly be judged dominant (for example, the political spirit is willing, the purpose is morally imperative, but alas the helicopters cannot fly in fog).

The strategic theorist can be thought of as a maker of conceptual tools for the practicing strategist. In his harrowing moral memoir of his combat tour in Vietnam as a young Marine officer, Karl Marlantes offers

the thought that “Weapons are tools. Tools are an extension of ourselves. Tools make you more effective. They are ego enhancing. Ask any good carpenter how he feels about a really good tool. We enhance our feelings of self-worth if we have good tools.”³

When strategic theorists discuss the relationship in strategic history between mind and muscle, brain and brawn, they are apt to commit the same kind of error as do politicians and soldiers, though from a different point of view. Of course, there is an objective empirical difference between thought and behavior. But in historical reality this seemingly unambiguous distinction is blurred. Behavior is thought in action. Not all concepts are converted into action and applied in strategic performance in the field, but it is a fair generalization to claim that there has to be some fusion of thought and deed. Orders and commands may be obviously exterior to the directed behavior, but there is a sense in which, once committed to action, the military instrument will have internalized the relevant part of the conceptual contribution to fighting power. The soldiers commanded will attempt to play out the roles that the conceptual script demands, while the troops’ armament and elements of supporting infrastructure reflect and express recent conceptual preferences. The distinction between the theory and practice of strategy is both objective and subjective; it is real, yet it is also artificial. The mind and its conceptual constructions are not set aside, parked for the duration, when soldiers go to war or when inert materials are converted and assembled into weapons.

The essential unity in the apparent duality that is strategic thought and strategic practice is a major source of misunderstanding and confusion in strategic studies, but so is what one can identify as the yearning for ever-more fundamental truth. By analogy, the God particle malady lurks close to my argument. The laudable desire to penetrate ever deeper into the complex mystery that is strategy has the unfortunate and undeserved consequence of fueling scholars in a futile quest. Expeditionary efforts to discover the true source of the metaphorical Nile for strategy divert endeavors from grasping that which is attainable and is both good enough for its purpose and incapable of major improvement. In truth, the source of the Nile for the understanding of strategy

already exists and is readily accessible in the canon of strategic classics written over the course of two and a half millennia.

As well as the hope that the specification and testing of assumptions will serve a panacea filtering duty, a reductionist urge can seduce scholars and commentators into the error of the big game hunt for the factor that could be the prime mover of strategic phenomena. Among its many virtues, the general theory of strategy serves to discourage monocausal explanation. For example, while there is support in the theory for the claim that strategy must be technological, in plentiful addition the theory asserts that strategy is political, human, ethical, and geographical, *inter alia*. But because strategy is so complex in its working parts, and causes and effects are inherently so problematic, there is always some empirical basis upon which an overreaching partial theory can rest. It is a prime duty of strategic education to explain the enduring structure and functioning of strategy so that the limitations of partial theory are identified. Just as there is no single master cause of war that might be expunged from history as a result of dedicated assault, though politics and human nature (or human behavior in society) would be prime candidates were causal cleansing practicable, so also there is no golden key to the understanding of strategy in theory and for practice.

Because the strategist always must attend to the balancing of political ends with available means, orchestrated in appropriate ways, there is a simple essential structure to any strategic project. On the one hand, the subject is formidably complex and encompasses a cast of thousands that can prevent success. But on the other hand, there is an elegant simplicity to the triadic structure of the strategy function that almost begs for duty in service of effective practical performance. Strategic tasks exist at every level of human effort, from grand strategy or national security, to a small-scale operation by a company of soldiers. Ends, ways, and means—and assumptions also, notwithstanding the skeptical comments offered above in their regard—are as unarguably different in meaning from each other as they are interdependent. Historical contextual detail is known to contemporaries as it may be to later scholars, in as much fine granular detail as they need or are able to discover. But in principle at least, the elegant simplicity of the ends, ways, and means trinitarian

formula provides so potent an organizing concept that the complexity, confusion, and even the chaos of messy interdependent behaviors and events are manageable. The competent strategist copes with complexity, confusion, and impending chaos; he does not seek the fool’s goal of a winning formula that rests upon a severely reductionist prioritization of what matters more, and less.

Five Perspectives on Strategy

Each perspective exploited here—concepts, ethics, culture, geography, and technology—encourages predatory theorizing by its scholar-advocates. Each has misled some scholarly devotees into asserting that it either does, could, or should provide the master narrative. By this I mean that strategic history is purported to be really the story of concepts and theory, or morality and its ethics, or culture, or geography and its geopolitics and geostrategy, or of technology (pick one, or possibly two). It is my conviction that if there is a master narrative to strategic history, it is to be found in the ceaseless quest for power by human beings both individually and socially regarded. Power is sought as a value in and of itself, as well as for its instrumental worth in aid of interests that are ever open to subjective evaluation as being defensive or offensive, though they usually are both. The relations of relative power, known as politics generically, are eternal and universal because they derive from the biology of our speciation and the sociology of our survival. Humans cooperate, combine, and compete for security that has survival value as well as more limited benefit. The master narrative is strategy itself and the politics that fuel it in all its complexity and with all its variability in character over time and in different places.

Concepts. Strategy cannot be understood and explained satisfactorily strictly with reference to ideas. Strategic theory and its expressive concepts are necessary but not sufficient ingredients in the mix that is strategy. Mind is superior to human muscle and to the inert material of military tools, but exceptions great and small are fueled mightily by material referents to perceptions and considerations, as well as by circumstances and memories. In addition, no matter its absolute or relative potency, the mind and its concepts may need muscular and other material enablers if they are to affect behavior. How a weapon is employed

is more significant than the weapon's technical characteristics, but this claim has a significant potential to mislead. Superior concepts carry no guarantee of strategic success in the deeply ironic realm of strategy (unless, that is, one succumbs, innocently of course, to unintended tautology). Excellence in concepts is always decided in practice by a host of factors, most importantly including their situational relevance. Also, strategic history reveals that the strategic intellect has often fallen perilously far behind emerging material technical realities. The case of cyberpower today and the pressing need for its strategic comprehension is but the latest example of conceptual lag.

Ethics. The ethical perspective on strategy is unarguably essential; what is more, it is unavoidable for human beings. The reason this is so is because we humans appear to be hard-wired to think in moral terms. It is a survival necessity for our species to reason morally. We need to distinguish right from wrong, and permitted from forbidden behavior. So far so good, since it would seem that moral reasoning, applied in ethical codes, is inherent in our humanity. Unfortunately, two major factors complicate the picture. First, one needs to recognize that just because all people, except for deviant and dysfunctional individuals, think morally, it does not follow that they think morally in the same way. In other words, while it matters profoundly that my neighbors should have a clear sense of right and wrong, what matters no less strongly is the content of their moral beliefs. What do they believe to be right-ful action? Culture rules over, transcends, and becomes ethics. The problem for the strategist is not an enemy who eccentrically is amoral, but rather one who is licensed in his behavior by an ethical code that expresses moral beliefs I reject. Second, it is a universal and apparently eternal truth that strategic ethics are always more or less situationally determined, notwithstanding the sincerity of the moral beliefs they typically reflect. Morality in action as strategic ethics frequently accepts the perceived necessity of circumstances as an excuse for what otherwise must be categorized as wrongful behavior. Moral beliefs always need translation into an ethical code for applicability in the unforgiving world of perceived and often misperceived (expedient) necessity.

Culture. Is there an American, Russian, Chinese, inter alia, way of war, or way in



U.S. Army (Ken Scarf)

Deputy commanding general for maneuver discusses strategy for Operation Shamshir in the Mata Khan District with U.S. Soldiers, Afghan National Army soldiers, and members of local Afghan Uniformed Police

strategy? Perhaps a shift from the singular to the plural is more appropriate, as also is serious entertainment of the idea that ways in war and strategy may change over time. If one is willing to grant the proposition that because a polity's military instrument is certain to be diverse in its complex character, it has to follow that it is likely to harbor a range of preferred "ways." The more closely one examines the idea of culture, and the more nuanced one's appreciation of its ever-arguable complex domain, the more difficult it can be to find forensic merit in it as an aid to strategic understanding, let alone as a valuable predictive tool. However, not only does culture inspire and sometimes demand an influence upon behavior, but inconveniently for analytical discipline there is culture in, as well as on, behavior. Culturally fueled action itself can beget culture in many forms. Is there not a sense in which all strategic behavior simply has to be culturally expressive? After all, such behavior is performed by necessarily and unavoidably encultured people who are shaped in their thoughts and deeds by the interests of the organizations they represent, interests expressed in some cultural forms. The challenge is neither to find the lacunae in culturalist arguments, nor to seek to refute anticulturalist assault. By and large, those necessary tasks have been completed. The mission now is to save what is sensible in the arguments for cultural awareness about strategy from the claims in its praise that were excessive. Sensibly understood, culture is not the singular golden key to strategic understanding, but it can nonetheless provide vital clues and cues that have practical value. Culture

is inescapable from Man's estate, and enculturation is always somewhat local in content to time, place, and as a consequence identity, much of which is socially inherited.

Geography. As culture is perilously imperial for strategic understanding in its elusive ethereality, so geography menaces conceptual grip for reason of its physical ubiquity. While much if not all that matters for strategy has some often arguably cultural content, there is no room for dispute over the presence of the geographical wherever strategy is thought or done. The unique geophysical properties of each of the five geographical domains of strategy—land, sea, air, space, and cyberspace—dominate tactical feasibility and hence operational and strategic opportunity for political gain and loss. The physical stage for the long-running drama of strategic history is indifferent to human strategic endeavors. Geography is neutral in human strategic history, but it is liable to be influential as security communities seek to exploit or offset geographically defined opportunities and limitations. Strategy must always be done within a geography, while often essentially it is about geography. And geography is not only a physical matter of the natural realm. In addition, the geography coveted most is deemed sacred and is uniquely valued by a political community (or two such). The challenge is less to recognize the relevance of geography to strategy than to be able to restrict its allotted scope for influence to some prudent distance short of the exciting assertion that geography is destiny. This claim has merit, but considered in isolation it falls a long way short of providing the whole grand narrative of strategic history.

Geography, geopolitics, and geostrategy have been imprudently neglected by students of strategy for more than half a century.

Technology. Strategy is not about technology, though much of the popular media effort to exploit the largely male fascination with machines focuses on the military means in the strategy triad. As a consequence, one might be excused for the belief that technology's artifacts lie at the core of strategy. Whereas the moral impulses behind ethics and the values expressed in culture themselves yield motives that in political form serve as the ends of strategy, concepts and technology are strictly enablers of strategic achievement; as tools disconnected from their strategic and political purposes, they have no merit. Neither strategic ideas nor weapon systems are discovered or manufactured in order to be attractive to the intellect or to the emotions as ends in themselves. Particular intellectual and technical forms are preferred for the anticipated excellence of their fit as enablers for the realization of strategic and military intentions. The argument that we fight with, and not for, technology engineered as weapons is so obvious as to be banal. And yet the whole political and societal effort to invent, pay for, produce, improve, and use with doctrinal best practice weapons and their supporting systems is so consuming of attention that the political ends and strategic ways often disappear from view. Money and physicality attract public attention. Weapons in action, photogenically often in motion at least, can be understood tactically, as can their monetary cost; hence they attract notice and controversy. Means are easier to grasp and debate than are strategic ways and political purposes. One might recall with advantage these immortal cognate words by Michael Howard: "the complex problem of running an army at all is liable to occupy his [the commander's] mind so completely that it is very easy to forget what it is being run *for*."¹ Expertise in tactical matters necessarily confers no like grasp of genuinely strategic concerns, but such expertise is essential if the strategist is to comprehend what his military instrument might be able to accomplish. Although strategy is ever superordinate in providing meaning for behavior, it has to be done by tactics. When understanding of strategy is not grasped in the round as presented in the general theory, its particular military instruments, ranging from special operations

forces, through long-range bomber fleets, to individually super-destructive weapons, commonly are confused with—they are mistaken for—strategy. This prime conceptual error of miscategorization is found most frequently in the mistaken belief that there are some inherently strategic weapons, while other weapons allegedly are substrategic or nonstrategic.

Strategy is a project that is always practiced in particular times and places. Whatever historical examples of strategy one elects to consider, they had temporal provenance and consequences as legacy value from past experience. The study and practice of strategy have to deal with continuity and change as well as causes and consequences. The future is not foreseeable, but a historical perspective ensures that the great chain of contestable historical causation should at least be noticed and respected, even though it could not have been predicted in real time, which is to say in advance. The ever-imperfect wisdom of hindsight serves as a source of caveats potent for contemporary strategic practitioners, who may be seduced by the apparent novelty of current challenges into forgetting that the chain of cause and effects (for example, first, second, and third order) is likely to be neither reliably predictable nor even seriously capable of anticipation. The practicing strategist is a risk taker of varying courage, wisdom, and luck who throws metaphorical dice. Clausewitz went to some pains to make this claim. Strategic education has been ill-served by paucity of cooperation between the somewhat rival "stovepipe" professionalisms of military history and strategic studies. Tribal members of the latter persuasion incline professionally to take a negative view of "mere" historical narrative, while members of the former readily wax eloquent on the subject of strategists with an empirical historical knowledge so thin that their theorization inherently must be suspect. The social scientist as strategist frequently finds professional historian colleagues to be methodologically challenged, specifically in their apparent neglect of the "so what?" question. Some historians are suspicious of social scientists who have been known to engage in professional poaching on their tribal terrain. Admittedly, the integrity of the past can be violated by later scholars who have cases to make that far transcend unimpeachable evidence. But since the facts of the past tend to be silent

unless they are explained, which means theorized, it is not obvious that the historian and social scientist must differ for reason of their preferred methodologies. I believe that social scientific strategists should be deeply respectful of the past, which means to the stories told by historians that collectively are termed history. In addition, indeed in parallel, I believe that historian-strategists need all possible assistance in seeking understanding for plausible explanations they can extract from the writings of their strategist colleagues who are social scientists. Adoption of the elementary, but elemental, triptych of ends, ways, and means as a guide for strategic historical enquiry would be a useful step toward some enlightening fusion of scholarly realms.

Although strategy can be examined in many perspectives, nonetheless it is a unity. When examined closely, each perspective is revealed both to be identifiably distinctive, yet porous to influence from other perspectives. It has to follow that the subject of strategy cannot sensibly be regarded as offering alternative flavors in substantive interpretation. It is not sound to conceive of strategy as being essentially, or even primarily, a conceptual, moral, cultural, geographical, or technological project (*inter alia*); it is all of these combined, even fused, albeit in combinations with historically widely varying relative weights. Strategy is a single enterprise. Theory and practice have to be considered as one whole project, not merely as joint ventures that episodically are linked in a relationship of some interdependence; the nexus is far more organic than that. The unity of all strategic phenomena is expressed effectively in strategy's general theory. That theory provides the big tent of understanding that shelters and indeed binds together the whole subject. **JFQ**

NOTES

¹ I am grateful to Richard Danzig for the inspired wording of the title to his monograph, *Driving in the Dark: Ten Propositions About Prediction and National Security* (Washington, DC: Center for a New American Security, October 2011).

² Michael Howard, *The Causes of Wars and Other Essays* (London: Counterpoint, 1983), 215–217.

³ Karl Marlantes, *What It Is Like to Go to War* (London: Corvus, 2011), 71.

⁴ Howard, 214, emphasis in the original.



Computer screens reflect on Sailor aboard USS *San Antonio* during International Mine Countermeasures Exercise in Bahrain

Globally Integrated Operations **A Reflection of Environmental Complexity**

By DANIEL H. McCAULEY

The real difficulty in changing the course of any enterprise lies not in developing new ideas, but in escaping old ones.

—John Maynard Keynes

Weapons of mass destruction. Accelerating rates of technological change. Transnational organizations. Cyber warfare. Regional and global competitor states. Violent extremism. Anti-access and area-denial threats. Fiscal constraints. These are just a few of the security environmental conditions within which the future joint force will operate. To be effective

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in such an unpredictable, complex, and dangerous world and to protect U.S. global interests, the joint force must operate in smaller units capable of aggregating at a moment's notice, reconfiguring in response to environmental challenges and opportunities, and disaggregating upon mission completion. These adaptable military responses must occur at increasing rates of speed leveraging insightful prepositioning of military forces around the world and rapid expeditionary basing. The ability to operate effectively in such a manner is the basis for the concept of *globally*

integrated operations that General Martin Dempsey, Chairman of the Joint Chiefs of Staff, is promoting as a way to project decisive force to protect U.S. global interests.

Operating in an increasingly interactive and dynamic global environment demands quick decisionmaking and agile command and control systems that enable "resources to be allocated, shifted, and deconflicted fluidly among combatant commanders as strategic priorities evolve."¹ Maladapted organizational structures and systems are not flexible enough, nor can they change fast

enough to respond effectively in uncertain and dynamic conditions. Based on outdated strategic assumptions or an unrealistic understanding of the environment, these organizations are doomed when operating in today's environment.²

As John Maynard Keynes stated, often the most difficult obstacle that must be overcome is one's own legacy, and the comfort that comes in doing things the same way as in the past. Unfortunately, that is the case with current Department of Defense (DOD) organizational structures and processes, which are basically anachronisms left over from the Cold War. Today, resources are too few, the world too complex, and the environment too unstable to maintain such an outdated structure. This article proposes that DOD must reorganize itself so that its processes and actions are more responsive to today's requirements and future global demands. Any organizational design must acknowledge that DOD cannot operate as it has for the past half century as global architects attempting to control events as they unfold. Instead, it must move to a design that focuses on resiliency and the management of global events.³

To understand organizational design requirements for a 21st-century joint force, the role of organizational design is discussed first in this essay. Next, as it specifically relates to the joint force, the strategic operating environment is analyzed. Next, the types of missions expected of the joint force are examined and assessed in the context of the environment. Next, shortfalls or misalignments in the current DOD construct are identified. Finally, broad DOD organizational design needs are suggested.

The Role of Organizational Design

Organizations are goal-directed, deliberately structured social entities linked to the environment that behave in predictable ways.⁴ A deep understanding of the environment shapes and reshapes an effective organizational design through the changing connections, relationships, and patterns of interaction. In essence, organizational design is a kind of geographic intelligence representing the organization's ability to situate itself in time and space relative to the environment.⁵ Leveraging insight and foresight, organizational design is the extension of the organization's goals or mission through the purposeful specification of

the relationships necessary to interact with selected variables within the environment. The dynamics of the interaction between mission and environment are the shaping mechanisms that ultimately define an organization's structure and the degree to which it is formal or informal, centralized or decentralized, flat or vertical, permanent or ad hoc, or some combination thereof.

There are two dimensions to any organizational design: structural and contextual. The structural dimension is the more visible and typically far more prominent, providing the "labels that describe the internal characteristics of the organization."⁶ It is concerned with "the ways in which the tasks of the organization are divided (differentiation) and with the coordination of these activities (integration). . . . It is concerned with patterns of authority, communication, and work flow."⁷ An organization's structural dimension (sometimes referred to as the "hard wiring") typically has six components:⁸

- formalization, which pertains to documentation as expressed in procedures, job descriptions, regulations, and policy
- specialization, or the degree to which tasks are subdivided
- hierarchy of authority and associated span of control
- degree of centralization for decisionmaking
- level of formal education and training of employees
- personnel ratio of people to various functions and departments.

Formally associated with the structural dimension is the concept of centralization, which refers to the level within the organizational hierarchy with authority to make decisions. In centralized organizations, decisions tend to be made at the top; in decentralized organizations, lower levels make similar decisions. As organizations grow larger and involve more personnel, the sheer number of decisions required would overwhelm senior leaders if some delegation did not occur. Thus, larger organizations permit greater decentralization. To ensure consistency, however, "larger organizations adopt more formal procedures to improve control" because direct "personal control becomes problematic as size increases."⁹ In smaller units, every decision effectively can involve the commander and thus these

organizations are typically highly centralized. With smaller size, however, comes less formalization and the ability to react and adapt more quickly because of a flatter organizational structure.

Unfortunately, an organization only defined by its hard wiring represents an impoverished view of design because it ignores the contextual dimensions, or "soft wiring." Contextual dimensions are "the less visible aspects that play a crucial role in determining organizational behavior and performance."¹⁰ The whole organization and surrounding environment display characteristics of the contextual dimensions. There are five classically recognized components of the contextual dimension: size, as measured by the number of employees; the tools, techniques, and actions used; the environment outside the organization's boundary; the goals and strategy defining organizational purpose and describing resource allocation; and culture and the underlying set of key values, beliefs, and norms.¹¹

The compatibility or fit between an organization's hard and soft wiring drives organizational performance. An organization's design directly affects personal performance in three main ways: it can motivate behavior through job definition and the use of rewards systems; it can facilitate behavior by providing methods and procedures and by placing personnel proximally to others for communication; and it can constrain behavior by limiting information, instituting formal procedures, and through the separation of groups or units from one another.¹² A consciously integrated organizational design thus considers both the hard and soft wiring of an organization.

The Strategic Environment

The organizational environment consists of those elements outside the boundaries of the organization to which it is sensitive and responsive.¹³ Those outside elements include technological, economic, legal, political, demographic, ecological, and cultural factors and are the primary drivers of environmental and organizational change. A comprehensive understanding of the strategic environment helps determine organizational structure(s) and, along with a keen understanding of the organization's mission, enable the development of a more focused set of factors that makes these broad environmental variables more relevant.¹⁴

Globalization has made the strategic environment essentially an open system. Either external or internal stimuli can compel change, and the permeability of the organizational boundaries enable “new demands, technologies, skills, and values to affect the system.”¹⁵ General Dempsey provided an assessment of the future operating environment in the Capstone Concept for Joint Operations (CCJO). In the CCJO, the Chairman describes the future security environment as “likely to be more unpredictable, complex, and potentially more dangerous than today.”¹⁶ The primary generator of the future security environment is the accelerating rate of change of many of the environmental variables.¹⁷

The worldwide flow of information and capital through digital networks, along with an equally mobile global population, markedly differentiates the future environment from the past. In this new global environment, the dynamics of these interrelated challenges create complex threats and security challenges. The many dimensions of future security challenges will cross-cut existing boundaries and command structures¹⁸ requiring a more highly developed worldview. Some of the future global trends include changing demographics and expectations, globalization, economics and national and international financial institutional health, increased energy demands, food and water scarcity, global population increases, environmental pollution, climate change and natural disasters, and advancements in space and cyberspace.

In addition to these global trends, a number of other contextual considerations must be accounted for in the strategic environment. Regional powers and rising global powers such as Brazil, Russia, India, and China present unique challenges for Washington. These countries possess military capabilities ranging from conventional forces to antiaccess and area-denial capabilities to cyberspace operators to nuclear weapons, and they must be accounted for in the development of environmental understanding. Other factors such as weak and failing states, radical ideologies, transnational criminal networks, terrorism, piracy, and urbanization add further complexity and dynamicity to an already dangerous operating environment.¹⁹ Still other factors that drive organizational redesign are changes in U.S. strategy, new technology,

changing fiscal constraints, and ineffective organizational operations.²⁰

A consolidated understanding of strategic conditions, trends, and other factors provides a comprehensive initial understanding of the operating environment for the joint force. Prior to developing a joint force organizational structure capable of operating within this environment, however, an analysis of the organization’s mission or anticipated mission sets is needed.²¹

Missions

The 2010 National Security Strategy states that the United States seeks a “world in which individuals enjoy more freedom and opportunity, and nations have incentives to act responsibly, while facing consequences when they do not.”²² From this global vision connecting security and prosperity, the National Military Strategy describes the joint force mission as one that “provides military capability to defend our [n]ation and allies, and to advance a broader peace, security, and prosperity.”²³ Linking the global military mission to the strategic environment, senior military leaders characterize the future security environment as involving “the proliferation of weapons of mass destruction, the rise of modern competitor nation-states, violent extremism, regional instability, transnational criminal activity, and competition for resources.”²⁴ These threats have created new and far more dangerous conditions than in the past.

Whereas the joint force previously operated in a relatively stable, state-centric environment, the recent diffusion of advanced technology means that small or middleweight militaries and nonstate actors have capabilities that only superpowers once possessed. This proliferation of technologically advanced weapons and munitions places the global commons at risk, threatening forces at their points of origin and as they deploy to operational areas. In addition, command and control capabilities and processes are radically changed as connectivity is greater between national authorities and tactical operators, but they are also far more vulnerable. Given the accelerating rates of change, the proliferation of weapons and communications technology, and an adversary’s ability to operate across multiple domains, the U.S. joint force must operate promptly across and through vertical and horizontal echelons.²⁵ Given the varied

conditions and threats that make up the strategic environment, DOD identified 10 primary joint force missions necessary to protect U.S. national interests:

- Counter terrorism and irregular warfare.
- Deter and defeat aggression.
- Project power despite antiaccess/area-denial challenges.
- Counter weapons of mass destruction.
- Operate effectively in cyberspace and space.
- Maintain a safe, secure, and effective nuclear deterrent.
- Defend the homeland and provide support to civil authorities.
- Provide a stabilizing presence.
- Conduct stability and counterinsurgency operations.
- Conduct humanitarian, disaster relief, and other operations.²⁶

The range of missions illustrates the complexities of the tasks facing the joint force. Unfortunately, none of these security challenges corresponds to current geographic and functionally based organizational structures.

Current DOD Organizational Design Misalignment

During peacetime, the operating environment is generally stable and processes are easily standardized. During war or other operations, the environment is dynamic and speed is of the essence. Rapid adjustments are necessary to facilitate timely decisions, which typically require circumvention of traditional structures and reliance on informal communication and collaboration.²⁷ As persistent conflict underscores the current security environment, the four traditional instruments of national power are involved in any proposed solution. Ambiguities in today’s security environment, lack of strategic clarity, and absence of an interagency integrating mechanism enable events or actors to evade traditional recognition processes or avoid detection by legacy organizations.

As described in the CCJO, DOD is too heavily invested in the formal and centralized components of its hard wiring. The current structure is too rigid and lacks the agility to respond quickly to the complexities associated with the range of security challenges. DOD exhibits a number of the

warning signs associated with a misaligned and unfocused organization:

- Strategic plans are not put into practice.
- Change is slow or stifled.
- Strategy execution is not placed within a formal planning and measurement structure.
- There is a diffusion of purpose and intent as commanders at all levels try to understand the strategy and figure out how they will be affected and what they will need to do to make it happen.
- There is inadequate coordination of interagency and DOD-wide projects.
- Attention is not focused on the right activities to gain the most resource leverage or effect.
- There are noticeable political dilemmas.
- Priorities are often unknown.
- Conflicting requirements for resources result in misallocation.
- Change initiatives are not completed.
- There is a general lack of strategic and operational perspective in the organization.

Typically, when warning signs such as these appear, most organizations “react by changing the organizational chart. They apply structural solutions to behavioral or process challenges,” attacking the specific symptoms rather than the underlying dynamics of the symptoms.²⁸ Tomorrow’s challenges, however, will overwhelm any simple structural reorganization.

To meet the challenges of the strategic environment, the Chairman is advocating an operating concept called globally integrated operations. In this operating concept, “Joint Force elements, globally postured, combine quickly with each other and mission partners to integrate capabilities fluidly across domains, echelons, geographic boundaries, and organizational affiliations.”²⁹ In essence, for the joint force to be effective, General Dempsey argues that the DOD organizational construct must reflect environmental complexities. If the environment has a dozen ways to affect an organization’s performance, the organization needs a dozen ways to respond or counter. As stated in the CCJO, change will be constant and organizations must also be constantly and quickly changeable, leveraging structures and “processes that are easily reconfigured

and realigned with a constantly changing strategy.”³⁰ To fulfill the mission of defending the Nation and its allies and advancing a broader peace, security, and prosperity, fundamental changes to DOD’s organizational structure is an absolute necessity.

DOD Organizational Design Requirements

In the development of any DOD organizational design, strategic thinking must be the centerpiece to help identify, respond to, and shape changes in the global environment.³¹ Organizations in uncertain environments are managed and controlled differently than those in a certain environment regarding positions, departments, control processes, and planning and forecasting. Organizations in certain environments seek predictable transitions and integration, desire legacy systems to generate order, seek preventative cures that enhance efficiencies, emphasize deliberateness, and are willing to work through formally recognized institutions.³²

In uncertain environments, organizations become increasingly sensitive to the environment to recognize threats and opportunities, which enable swifter responses. Sacrificing organizational efficiencies for effectiveness, the organization becomes more complex to deal with the complexities of the operational environment. In addition, planning and forecasting become even more important as a way to position the organization for coordinated, speedy responses. As such, uncertain environments value the organizational attributes of speed, flexibility, integration, and innovation, which mean building on and around “people’s abilities rather than limiting them for the convenience of easily recognized roles.”³³

The current DOD construct has fostered the creation of well-structured, unbending organizational boundaries. Unfortunately, operating in an uncertain environment requires organizations to make their internal and external boundaries more permeable and flexible.³⁴ DOD must find the right fit between the external environment and the internal structure. The joint force requires an adaptable, responsive organizational structure that accounts for the 10 assigned primary missions and can respond to challenges that span the range from major combat operations; to limited contingency operations; to military engagement, security cooperation, and deterrence.

The combatant commands, Services, and Joint Staff all affect the organizational design of the U.S. military. Combatant commanders are the link between the national strategic level of decisionmaking and the forces that conduct operations. Combatant commanders have the responsibility for planning and executing strategies and plans for their areas of responsibility.³⁵ The design focus, however, must not be on the warfighting arm solely; it must also consider the roles and functions of the Services and Joint Staff as they relate to the assigned primary missions and the support they provide to the combatant commands. The Services have the responsibility for training, organizing, and equipping Servicemembers, thus providing ready forces to the combatant commanders for the execution of U.S. military strategy.³⁶ The Joint Staff supports the Chairman in his duty of providing military and strategic advice to the President and Secretary of Defense. Integrating annual assessments provided by the Services and combatant commands, the Chairman provides independent comprehensive assessments and advice “that cut across missions, domains, functions, and time” and “inform the development of national security and defense strategy, policy, doctrine, and guidance.”³⁷

Given the Chairman’s new operating concept of globally integrated operations, the military will transform from a conventionally focused and capital-intensive (for example, costly weapons systems such as the F-35) force to one oriented on small, adaptable, globally deployable units that require well-trained, experienced counterinsurgency forces and military police.³⁸ Mirroring the complexities found in the strategic operating environment requires additional specialized units to operate in the cyber and space domains as well as to prepare for and respond to weapons of mass destruction incidents.

Although maintaining a traditional conventional force capable of deterring and, failing that, defeating a near-peer competitor remains a vital necessity, the need for the entire joint force to possess that primary capability is no longer affordable. Instead, the unit of choice for the force will be the team. Teams of specialists within the force must understand and manage complex problems in a fast-changing and highly competitive environment. To leverage these smaller units, operational structures must be flatter and incorporate lateral processes to be more



U.S. Air Force (Timothy Chacon)

Joint team of Soldiers, Sailors, and Airmen assigned to Kandahar Provincial Reconstruction Team undergo predeployment language and cultural instruction training

responsive to immediate tactical considerations. Lateral processes enable personnel “to make more decisions, different kinds of decisions, and better and faster decisions.”³⁹ Lateral processes will require the force to embrace decentralization, when appropriate, increasing the capacity for decisionmaking, freeing up senior leadership for other decisions, and making the organization more adaptable to change.

Given the complexities of the strategic environment and the assigned military missions, organizations structure themselves in four ways or combinations of ways: functionally, geographically, process, and product or plan. Organizing by function allows the joint force to present a consolidated focal point to allies, partners, and other regional actors and enables sharing of resources and expertise across geographic lines while promoting standardization. Organizations develop geographical structures as operations span regions of the world and there is a need to be close to allies and partners (and threats), and to minimize response times and to reduce cost of travel and transportation. A process structure centers on a complete flow of work ranging from plan initiation to development. Throughout the process, each functional or geographic stakeholder participates in the sequential flow. A product or plan structure focuses on the development of specific or multiple plans from end to end, which often encompasses multiple processes and functions.⁴⁰

Primarily operating in an uncertain global environment, combatant command-

ers fight wars and focus on the present or the near future. The Joint Staff and Services primarily operate in a more certain domestic environment, are future-focused, and are in the business of preparing for war, not fighting it. Thus, the organizational design structures for the Joint Staff, Services, and combatant commands must be reflective of their specific roles and missions as well as the specific environment within which they operate. Any DOD organizational design must account for the stability of certain components as well as the relative instability of dynamic or uncertain components. Each suborganization is designed and managed differently and yet must remain part of the whole.

The change that globally integrated operations represents is essentially a change in strategy—specifically, the ways and means. Changes in strategies have far-reaching implications for the entire enterprise, and any institutional changes must address the following components.

Doctrine. Doctrine is traditionally a compilation of “best practices” based on experiences and lessons learned. Adaptable and agile organizations operating in a dynamic environment will be less able to rely on previous organizational experiences; rather, through necessity, they will rely increasingly on personal innovation or creativity in response to unique situations. Doctrine must be transformed to emphasize a broader range of general operating concepts and be considered a type of intellectual “toolkit.”

Organization. The primary focus is traditionally on the combatant command

or the warfighting organization. The DOD enterprise, however, must be part of a holistic design that acknowledges and integrates the roles and functions of the Services and military departments, Chairman and Joint Staff, Office of the Secretary of Defense for Policy, the formal and informal relationships with the Department of State’s Policy and Planning Staff, and the National Security Staff’s interagency policy committees. The design must also consider congressional committees with direct ties to the national security enterprise.

Training. Exercises and training programs must be “scripted” for globally integrated operations. Joint exercises and training cannot be one-dimensional and must mirror the complex, dynamic environment within which the joint force will operate. Joint forces must become accustomed to operating in degraded environments with minimal higher headquarters and senior leadership command and control injections and direction. Scenarios must present a hybrid of challenges that exercises the adaptability and agility of leaders and units as they reconcile environmental, mission, and capabilities mismatches. Training programs must encourage creativity and innovation and be accepting of, if not advocates of, failure.

Materiel. With major combat operations becoming less likely, future development and acquisition efforts must be special operations—and cyber-focused. DOD budgeting, acquisition, and procurement processes must facilitate rapid prototyping and

development. Small technological steps must be the norm instead of the traditional effort to hit the technological home run. Materiel must be readily available and easily adaptable to meet dynamic environmental conditions.

Leadership and Education. The Services and joint force must embrace the multicultural, multilingual, and multiperspective world that composes the strategic environment. Servicemembers must be recruited, trained, educated, and promoted based on their abilities to think beyond narrow ideologies and singular concepts. Leaders must not only possess technological and tactical skills but also demonstrate strengths in the traditional social sciences, the emerging norms of an information society, and strategic thinking. Educational institutions must emphasize critical, creative, conceptual, and contextual thinking competencies while developing leaders who display comfort with ambiguity and ill-defined objectives. Educational outcomes must stress understanding, intent, multiple contexts, and the idea that there are potentially multiple acceptable solutions to any problem. Institutions must deemphasize a product-focused, easily measured, checklist-oriented training mentality.

Personnel. Today's organizations need horizontal thinkers—personnel capable of thinking broadly across disparate subject matters as well as conceptually. The development of a permanent professional Joint Staff officer corps, as opposed to the current temporary or “borrowed” Service staff officer concept, is needed to competently and quickly aggregate, transition, and disaggregate ad hoc organizations in response to environmental demands. Training, education, promotion, and retention systems must be redesigned to facilitate member selection and development.

Facilities. A globally integrated operational concept requires facilities around the world to be capable of supporting and sustaining the joint force. They must leverage advanced technology but also be capable of performing degraded operations. Operational, training, and educational organizations must provide architecture, infrastructure, support, and cultural experiences that mirror the challenges of the operating environment. Facilities and supporting infrastructure must possess the flexibility to adapt rapidly to changing conditions, missions, and organizational demands. Some inefficiencies

resulting from redundant infrastructure and capabilities must be tolerated to enhance effectiveness and reduce risk.

Organizations are deliberately structured, goal-directed, social entities that reflect a deep understanding of the strategic environment. The concept of globally integrated operations represents the Chairman's profound grasp of the current and future environmental complexities and the role the joint force must play in attaining national security objectives. To operate effectively and successfully in this dynamic environment, DOD must redesign its entire enterprise to include not only its organizational structure but also the associated doctrine, training, materiel, leadership, education, personnel, and facilities needed to implement and support this concept.

The DOD organizational design of 25 years ago reflected the stability and certainty within the strategic environment then. Today and in the future, the speed of change in an age of technological innovation and globalization means there are no longer any certainties for the DOD enterprise. To provide effectively for the security of the United States, joint force senior leaders must capitalize on current opportunities to escape the traditional ways of operating and to develop agile organizational structures and processes that reflect the realities of the global environment. **JFQ**

NOTES

¹ *Capstone Concept for Joint Operations* (CCJO): *Joint Force 2020* (Washington, DC: The Joint Staff, 2012), 5.

² Joshua C. Ramo, *The Age of the Unthinkable* (New York: Little, Brown, 2007), 192.

³ *Ibid.*, 199.

⁴ Richard Daft, *Theory and Design of Organizations* (Singapore: Cengage Learning, 2010), 11.

⁵ T. Irene Sanders, *Strategic Thinking and the New Science* (New York: The Free Press, 1998), 120–123.

⁶ Gareth Morgan, *Imagin-i-zation* (San Francisco: Berrett-Koehler, 1997), 278.

⁷ Fremont E. Kast and James E. Rosenzweig, *Organization and Management: A Systems and Contingency Approach* (New York: McGraw-Hill, 1979), 20.

⁸ Daft, 15.

⁹ Thomas C. Powell, “Organizational Alignment as Competitive Advantage,” *Strategic Management Journal* 13, no. 2 (February 1992), 121.

¹⁰ Robert W. Keidel, *Seeing Organizational Patterns: A New Theory and Language of Organi-*

zational Design (San Francisco: Berrett-Koehler, 1995), 77.

¹¹ Daft, 16.

¹² David A. Nadler and Micheal L. Tushman, *Competing by Design: The Power of Organizational Architecture* (New York: Oxford University Press, 1997), 47.

¹³ Daft, 11–12.

¹⁴ Kast and Rosenzweig, 562–565.

¹⁵ *Ibid.*, 563.

¹⁶ CCJO, 3.

¹⁷ *Mission Command White Paper* (Washington, DC: The Joint Staff, 2012), 4–6.

¹⁸ CCJO, 3.

¹⁹ U.S. Joint Forces Command, *The JOE 2010: Joint Operating Environment* (Suffolk, VA: Joint Futures Group [J59], 2010), 12–58.

²⁰ *Strategy-Structure Alignment* (San Francisco: InnovationPoint, LLC, 2009), 1–3.

²¹ Daft, 1.

²² *The National Security Strategy* (Washington, DC: The White House, 2010), 2.

²³ *The National Military Strategy of the United States of America* (Washington, DC: The Joint Chiefs of Staff, 2011), i.

²⁴ CCJO, 2.

²⁵ *Ibid.*, 5–6.

²⁶ *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Department of Defense, 2012), 1–2.

²⁷ Anna Windischer et al., “Characteristics and Organizational Constraints and Collaborative Planning,” *Cognition, Technology & Work*, no. 11 (2009), 87–99.

²⁸ Ron Ashkenas et al., *The Boundaryless Organization* (San Francisco: Jossey-Bass, 2002), 114–115.

²⁹ CCJO, iii.

³⁰ Jay R. Galbraith, *Designing Organizations* (San Francisco: Jossey-Bass, 2002), 75.

³¹ Jean Mylen, “Strategic Safari,” *Leadership* (January/February 2002), 19.

³² Powell, 119.

³³ Charles Handy, *The Age of Paradox* (Boston: Harvard Business School Press, 1994), 83.

³⁴ Ashkenas et al., 122.

³⁵ Joint Publication 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: The Joint Staff, 2009), I-14.

³⁶ *Ibid.*, I-14–1-15.

³⁷ Chairman of the Joint Chiefs of Staff Instruction 3100.01B, *Joint Strategic Planning System* (Washington, DC: The Joint Staff, 2008), A-5.

³⁸ Thomas P.M. Barnett, *Blueprint for Action* (New York: Berkley Books, 2005), 2.

³⁹ Galbraith, 44.

⁴⁰ Daniel H. McCauley, “Goldwater-Nichols II: It's Not What You Think,” *Small Wars Journal*, October 2012, available at <<http://smallwars-journal.com/jrnl/art/goldwater-nichols-ii-it%E2%80%99s-not-what-you-think-x>>.



Vice President Biden, Ambassador to Iraq, and Iraqi officials meet for start of Government of Iraq Day of Commitment ceremony

Building Ministerial Capacity in Host Nations

By KEITH M. BOYER and ROBERT R. ALLARDICE

The United States seeks an Iraq that is sovereign, stable, and self-reliant with a just, representative, and accountable government; a state that is neither a safe haven for, nor sponsor of, terrorism; an Iraq that is integrated into the global economy and a long-term U.S. partner contributing to regional peace and security.¹

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Long-term success in Iraq as measured by attainment of our strategic objectives as presented above surely relies on a robust, focused, and unified whole-of-government advising mission. Sustainment of gains in physical infrastructure, training, and equipment is largely dependent on institution-building at the ministerial level. Yet Service and joint doctrines are lacking regarding building partnership capacity (BPC) and security force assistance (SFA) at the strategic level, especially in the area of military support to the development of self-sustaining institutional capacity within host nation ministries.

This article proposes a framework based on experiences in Iraq that could be used by joint or multinational force senior leaders to help focus an engagement strategy aimed at developing a self-sustaining ministerial institutional capacity, specifically in war-torn host nations where force generation is part of the mission set as well. The intent here is not to endorse one organizational construct over another, or to address the specific advising skills and/or education and training needed to effectively influence behavior in an advisory role. Rather, the purpose is to highlight key elements for consideration by senior leaders in creating an

effective mission environment for ministerial institutional capacity-building.

Background

Given experiences in Iraq and Afghanistan, much has been written recently about the need for changes in the U.S. approach to BPC/SFA—from how we train and organize within the Department of Defense (DOD) to how we partner with other nations and governmental and nongovernmental agencies. Scott Wuestner, for example, proposes a Security Advisory and Assistance Command (SAAC) as the “capstone proponent”² of his detailed force structure operational concept. Under Wuestner’s concept, SAAC is a U.S. Army Training and Doctrine Command Table of Distribution and Allowances unit responsible for all DOD BPC/SFA issues,

be informally or poorly defined or fundamentally different from ours.

The following assessments regarding advising in the Iraqi Ministry of Interior (MOI) are certainly applicable to the advising mission in Iraq’s Ministry of Defense (MOD), and are based on the authors’ experiences in 2007–2008. According to the Libra Advisory Group seminar report:

The U.S. military deployed a large number of advisors into Iraqi ministries including the MOI to work on developing management capacity. . . . Many advisors sought to import processes and systems from their own home departments (U.S. Army, FBI [Federal Bureau of Investigation], DEA [Drug Enforcement Administration], etc.) without consulting Iraqi partners on what

*opment and reform must be as holistic as possible.*⁶

U.S. doctrine provides little specific guidance aimed at strategy to develop self-sustaining ministerial institutional capacity. In discussing BPC, Air Force Doctrine Document 2-3, *Irregular Warfare*, uses mostly generic descriptions and language such as “Successful collaboration, requiring Airmen to have detailed knowledge of the local culture, society, language, and threat, may foster enduring relationships,”⁷ and really does not address the strategic issue of successfully building ministerial capacity. Chapter 6 of FM 3-24 is a 22-page segment on “Developing Host Nation Security Forces,” including a framework for that development based on the SFA organize, train, equip, rebuild, advise (OTERA) mission, but it too offers little at the ministerial level.⁸ The *Commander’s Handbook for Security Force Assistance* was published in 2008 to “fill a gap in the doctrinal literature”⁹ on SFA at the brigade and regimental combat team (BCT/RCT) levels, specifically with best practices and lessons learned from Iraq and Afghanistan. Consequently, since it focuses at the BCT/RCT levels, it also offers little guidance regarding the OTERA mission as it applies to ministerial institutional capacity-building, a key strategic consideration if long-term success is to be realized.

Given our tendency to fall back on processes we are most comfortable with at the peril of prolonging our involvement or, worse, hindering ultimate success, it is incumbent on the senior leadership of the units/teams involved in ministerial capacity-building to establish a strategic common operating picture (COP) that targets host nation processes. We must shape and influence their processes in a Western way rather than replace or impose our Western processes on them. This article proposes a strategic framework that can help guide a commander’s development of such a COP. The proposed model relies on basic elements applicable regardless of whether the “right” organizational construct of the advising team and individual or collective training of the advisors exists. In other words, “It will work with whatever you’ve got.”

Strategic Framework

The proposed strategic framework for building host nation ministerial capacity

rather than learning a nation’s processes, our tendency is to “shape and influence in a Western way” by using U.S. processes

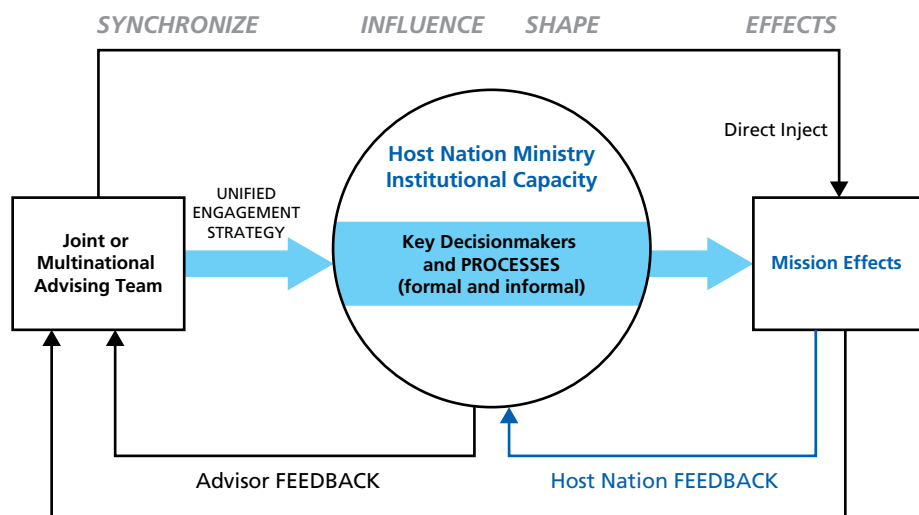
and includes, among many ideas, a deployable Joint National Ministry Team directed by a State Department representative.³ While wholesale reorganization of the way we organize, train, and assist the world in BPC/SFA operations may well be the long-term answer, additional guidance is needed immediately to address shortcomings presented below as documented in our own authoritative writings as well as those of others.

U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*, correctly points out that “Perhaps the biggest hurdle for U.S. forces is accepting that the host nation can ensure security using practices that differ from U.S. practices.”⁴ Rather than learning a nation’s processes, our tendency is to interpret and “shape and influence in a Western way” by using U.S. processes. In Iraq and Afghanistan, much of that tendency is due to the security situations; we have been involved in fighting at the same time that we are building, equipping, and sustaining host nation troops and developing institutional capacity within the ministries. We often have a sense of urgency not necessarily shared by the nation we are assisting. However, a big part of that tendency has to do with the fact that it is our own processes we are most comfortable with, and it takes longer to learn the host nation’s processes, many of which may

*was required and increasing their competence to build their own systems—they grew frustrated when their solutions were not implemented and in many cases essentially took over the running of the directorates they were supposed to advise. This in turn inhibited the development of Iraqi capacity.*⁵

Andrew Rathmell provides two basic guidelines for addressing institutional capacity-building:

First, to resist the tendency to use the following phrases: “What the Iraqis need are . . .”; “putting an Iraqi face on . . .”; “obtaining Iraqi buy-in. . . .” Sometimes, Iraqi officials will play the game astutely. When asked by the umpteenth set of Coalition visitors if they have documented plans or procedures on topic X or topic Y, they will dust off a beautifully presented set of slides handed to them by previous generations of advisors. . . . The point is not that Coalition advisors should not be providing their Iraqi counterparts with good ideas, international examples, or advice. It is that the aim of the advisory process should be either to support and inform existing reform efforts or, where these do not exist, to help Iraqi officials to understand how their problems—which they usually understand all too well—can be addressed in new ways. . . . Second, any work on institutional devel-

Figure 1. The Strategic Framework

has as its basis the authors' experiences in standing up an interim organizational construct, the Directorate of Defense Affairs (DDA),¹⁰ during reorganization within Multi-National Security Transition Command-Iraq (MNSTC-I) in early 2008. The reorganization placed the appropriate transition teams and advisory teams under the newly established Director of Interior Affairs and Director of Defense Affairs. The DDA had teams assisting the Iraqi army, Coalition Army Advisory Training Team, Coalition Air Force Transition Team, Navy Maritime Strategic Transition Team, MOD Civilian Assistance Team, and MOD Military Joint Headquarters Assistance Team institutional leadership, and included the coalition Functional Capability Teams (FCTs) discussed below. Previously, the individual training and advisory teams reported directly to the MNSTC-I three-star commanding general.

To focus the strategic direction of the newly formed DDA organization, a COP was developed that included four key elements:

- Clearly define the target: transition and advisory team advisors engage and influence their Iraqi principals with a synchronized strategy to shape Iraqi processes to achieve desired effects.
- Engage with a unified strategy: engagement strategy is developed with advisors and FCTs.
- Identify their processes: FCTs focus on institutional issues related to Iraqi

processes aligned with their function; the "process experts."

- Ensure appropriate feedback: transition and advisory team advisors provide feedback relative to effectiveness of the strategy.

These elements form the basis of the strategic framework depicted in figure 1.

One of the main goals of the framework is to focus attention where it should be when developing institutional capacity: the host nation key decisionmakers and *their* processes (the circular "target" in figure 1). The banner words across the top capture the essence of the model: *synchronize* an engagement strategy to *influence* host nation leaders to *shape* their processes to achieve desired *effects*. Specifics of the synchronized engagement strategy are constantly refined (or completely overhauled) based on change of commander's intent, redefined security posture, and maturation of institutional capacity. Continuous multiple feedback loops must be included to make an effective assessment. Lessons learned and best practices should be captured and communicated. The "Direct Inject" line bypassing the ministry development target recognizes that factors such as the security situation may dictate immediate results largely independent of institutional capacity-building. This may take the form of direct infusion of multinational funds to generate and train host nation troops during early or "surge" stages of assistance.

The remainder of the discussion focuses on the four key elements of the stra-

tegic framework within the context of the authors' experiences, but we contend that the basic principles apply irrespective of the particular organizational structure of the advising team or whether the lead advising agency is DOD or the State Department.

Clearly Define the Target. For building ministerial institutional capacity, clearly the "targets" are the key decisionmakers, and in the current context, the main Iraqi civilian and military leaders within MOD. However, as with any successful advisory mission, key decisionmakers and influential relationships, both formal and informal, must be understood. This may or may not be difficult based on the nature and scope of the advisory effort, especially when that effort is occurring in war-torn nations such as Iraq and Afghanistan.

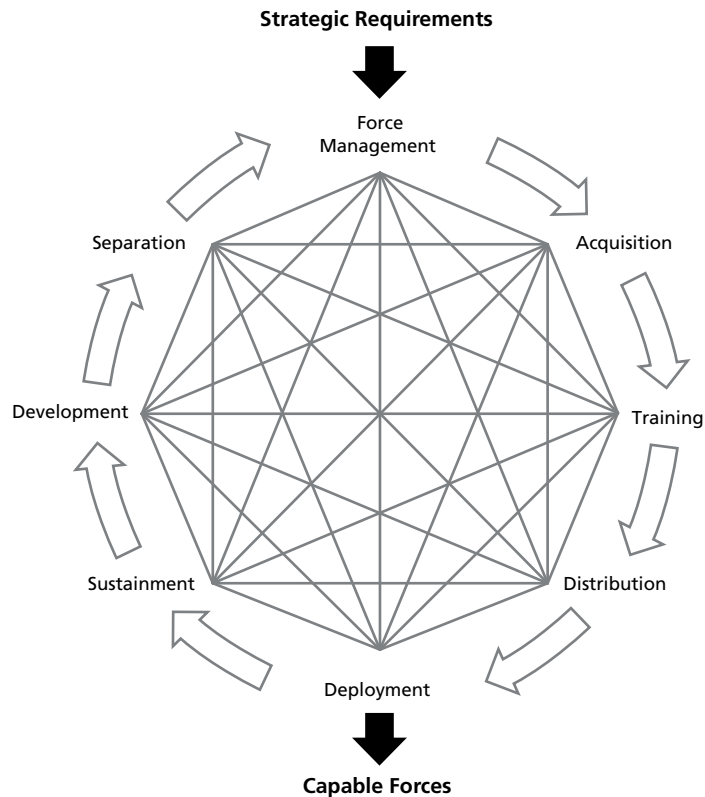
Consider, for example, the DDA mission statement: "Develop Iraqi Ministry of Defense capability in order to generate and replenish Iraqi joint forces and develop Ministry level institutional capacity." The need to replace U.S. and coalition forces with Iraqi forces to perform basic security functions (force generation) in a timely manner can easily overwhelm the development of the ministerial management functions (institutional capacity) needed to support them. Yet, as pointed out in the Libra Advisory Group seminar report, "Without creating the management functions to effectively employ and control the available resources, the resources themselves are at best inefficiently utilized, and at worst can be dangerous."¹¹

Characteristics associated with support of force generation often include:

- generation of forces as an "end"
- relatively fast process with joint/multinational team leading
- not waiting for full host nation participation/decisions
- minimizing requirements for host nation to deal with tough problems.

Characteristics associated with institutional capacity-building include:

- generation of forces as a "means"
- slower, less formal process with host nation leading
- requiring full host nation participation and decisionmaking
- maximizing requirements for host nation to deal with tough problems.

Figure 2. Army Organizational Life Cycle Model

These characteristics clearly can be at odds. The security situation largely dictates the balance between them. The U.S. strategy in Afghanistan, which includes “developing more self-reliant Afghan security forces,”¹² continues to place our coalition forces in this same force generation versus institutional capacity balancing act, which can create, in essence, a moving target that exacerbates an already complex and dynamic environment.

Engage with a Unified Strategy. As stated in the *Commander’s Handbook for Security Force Assistance*, one of the SFA imperatives is to “ensure unity of effort/unity of purpose.”¹³ This is another basic premise that can easily be ignored in our haste to get to the job of “advising.” In the current context, unity of effort is interpreted as engaging the MOD with a synchronized strategy—synchronized in message, in approach, and in a timely manner with key Iraqi MOD process milestones. Clearly, this necessitates an understanding and communication of Iraqi processes. It also comes down to commander’s intent and focus, as well as affording means for and encouraging frank, open, and honest communication and feedback. One

such example is presented in the “Ensure Appropriate Feedback” section below.

Additionally, the MNSTC-I interim reorganization itself helped facilitate an improved engagement strategy by aligning “its structure more effectively to support building MoD and MoI capacity in these key institutional functions.”¹⁴ The DDA was stood up to better synchronize the efforts of the five advisory teams previously mentioned within the areas managed by FCTs: acquisition of people, training and development, force management, budget, acquisition of materiel, and sustainment. The basis for these six functional areas was the Army Organizational Life Cycle model shown in figure 2.¹⁵ This illustration can be used as a conceptual framework showing general organizational development and progression (clockwise around the figure), but also showing the complex, dynamic interaction between the various functions (interconnecting lines). Any change to a resource in any one functional area is likely to affect most if not all of the other functions.

The point here is not to endorse an organizational structure—the DDA was the right choice at the right time and was

in effect for about 1 year—but to provide insight into the context in which the current strategic framework is presented. Regardless, the model in figure 2 is a fair depiction of how security institutions build and sustain forces and the complexities associated with institutional capacity development that necessitate a common strategic engagement strategy with robust communication and feedback.

Identify Their Processes. This is probably the most challenging element for reasons discussed previously. Additionally, what makes it even more challenging is that it is not enough to simply identify host nation ministerial processes, but it is needful to understand and shape them from *their cultural viewpoint*, not ours. While it may be possible to implement Western-style processes, advisors will usually be more successful influencing their principals if they understand their host nations’ processes and cultures. Similar to identifying key decisionmakers and relationships, both formal and informal processes must be identified. Learning host nation ministerial processes and shaping those processes and/or decisions made within them through the host cultural lens are keys to establishing influential relationships. It is the way to “win hearts and minds” at the ministerial level.

As basic as this premise is, it can be (and is) easily overlooked. In the current context, it was not until the January 2008 MNSTC-I reorganization that key MOD processes were identified, cataloged, and discussed regularly by coalition DDA forces; MNSTC-I was established in June 2004. During the standup of the DDA organization in January–February 2008, over 50 processes, some more formal than others, were identified in the various functional areas (acquisition of people, training and development, and force management, among others). While not every advisor could or should be expected to fully understand each of these processes, having knowledge of and access to those processes that affect decisions made in that advisor’s area are needed. For example, an advisor to the MOD Director General, Defense Policy and Requirements, has to have a good understanding of MOD budgeting and the key players in that process to help influence requirement decisions in a timely manner with budget decisions.

Ensure Appropriate Feedback.

Continuous multiple feedback loops must occur in order for the strategic framework to be effective in the complex, dynamic SFA environment. As depicted in figure 1, one loop from the host nation ministry back to the joint/multinational advising team should be accomplished primarily by the advisors in relation to the effectiveness of the engagement strategy. This is the “how are we doing” regarding the day-to-day business of developing ministerial institutional performance. To be most effective, this feedback must be shared openly and honestly among the advisors who are the most visible face to the ministerial leaders and entire SFA team. In this case, the FCTs focused on coordinating the engagement strategy with the advisors.

For example, a weekly “sync meeting” was chaired by the DDA and attended by all key advisors and FCT leads. During the meeting, advisors shared important decisions and outcomes from crucial Iraqi meetings held within the MOD. Important insights into principal advisees’ cognitive maps and key formal or informal Iraqi influencers were gleaned. Furthermore, FCT leads would highlight current and future issues within their functional areas based on their involvement with the five primary advising teams and interaction with the MOD. The feedback was provided in simple one-page summary formats developed during the reorganization standup and cataloged by date. Both of these important feedback mechanisms helped synchronize a common advisor engagement strategy with MOD principals and identify critical emerging issues potentially requiring the commanding general’s intervention.

The other feedback loops in figure 1 are more about the “how are we doing” regarding mission effects. For example, building and replenishing forces use metrics that are generally easier to define and measure. Ideally, the feedback loop from mission effects back to the host nation ministry is developed by the host nation, but in the case of a newly developing ministry, it is likely that the SFA team would aid in the development of these metrics.

Conclusions

The establishment of an effective mission environment for ministerial institutional capacity-building is chal-

lenging, especially when force generation is part of the mission set. U.S. doctrine and handbooks are “vague at best”¹⁶ at providing guidance in this area, which is so critical to long-term success of military support to missions focused on developing self-sustaining capacity. In fact, our own authoritative guidance and numerous independent studies point out that one of the single biggest problems we face in performing such missions is overcoming tendencies to impose Western-style processes without attempting to learn and use host nation processes, however ill-defined they may be. Such an approach, however well intended, is likely to prolong our involvement or, worse, hinder ultimate success.

The strategic framework presented here provides a simple but effective template for focusing advisory efforts aimed at developing self-sustaining institutional capacity in host nation ministries. In doing so, it helps fill a crucial doctrinal gap in the BPC/SFA mission area. Senior leader consideration of the four basic elements contained in the model will help create a mission environment that facilitates effective advising at the ministerial level. The basis for the framework is proved through application within MNSTC-I in early 2008, which provided the context for the current presentation. Application of the model better synchronized the coalition advising team efforts working within Iraq’s MOD by:

- mapping out over 50 Iraqi processes
- providing a clearer understanding of formal and informal MOD decisionmakers, influential relationships, and processes
- establishing regular forums and feedback mechanisms that promoted open and frank communication between advisory team members and senior leaders of the DDA.

In war-torn nations such as Iraq and Afghanistan, there is likely to remain a challenging balancing act between force generation and institutional capacity development, the latter generally regarded as being much slower to achieve. However, given that self-reliance is likely to remain one of our long-term objectives in these state-building efforts, commanders must effectively manage that balance in a focused, strategic manner. The framework provided here will help. **JFQ**

NOTES

¹ *Measuring Stability and Security in Iraq: September 2009 Report to Congress* (Washington, DC: Department of Defense, November 4, 2009), available at <www.defense.gov/pubs/pdfs/9010_Report_to_Congress_Nov_09.pdf>.

² Scott G. Wuestner, *Building Partner Capacity/Security Force Assistance: A New Structural Paradigm*, Letort Papers (Carlisle, PA: Strategic Studies Institute, February 6, 2009), 38, available at <www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=880>.

³ *Ibid.*, 40–46.

⁴ Field Manual (FM) 3-24/Marine Corps Warfighting Publication (MCWP) 3-33.5, *Counterinsurgency* (Washington, DC: Headquarters Department of the Army, December 2006), 6-3.

⁵ Centre for Defence Studies and Libra Advisory Group (LAG), Security, Stabilisation and Development, “Building Security Institutions in Conflict-affected Environments: Learning from Iraq,” Seminar Report, LAG and King’s College London, April 30, 2009, 2.

⁶ Andrew Rathmell, “Fixing Iraq’s Internal Security Forces: Why Is Reform of the Ministry of Interior So Hard?” PCR Project Special Briefing, Center for Strategic and International Studies, November 2007, 12–13.

⁷ Air Force Doctrine Document 2-3, *Irregular Warfare* (Washington, DC: Headquarters Department of the Air Force, August 1, 2007), 27, available at <www.fas.org/irp/doddir/usaf/afdd2-3.pdf>.

⁸ FM 3-24/MCWP 3-33.5.

⁹ Joint Center for International Security Force Assistance (JCISFA), *Commander’s Handbook for Security Force Assistance* (Fort Leavenworth, KS: JCISFA, July 14, 2008).

¹⁰ *Measuring Stability and Security in Iraq: March 2008 Report to Congress* (Washington, DC: Department of Defense, March 2008), 33, available at <www.defense.gov/pubs/pdfs/Master%20%20Mar08%20-%20final%20signed.pdf>.

¹¹ “Building Security Institutions in Conflict-affected Environments: Learning from Iraq,” 1.

¹² Seth G. Jones, *U.S. Strategy in Afghanistan*, CT-324 (Santa Monica, CA: RAND, April 2009), 1, available at <www.rand.org/content/dam/rand/pubs/testimonies/2009/RAND_CT324.pdf>.

¹³ JCISFA.

¹⁴ *Measuring Stability and Security in Iraq: March 2008 Report to Congress*, 33.

¹⁵ *How the Army Runs: A Senior Leader Reference Handbook, 2007–2008* (Carlisle, PA: U.S. Army War College), 10.

¹⁶ Colonel Terrance McCaffrey III, USAF, chief, Doctrine and Education Group, U.S. Joint Forces Command, J7, personal correspondence, February 25, 2010.



District chief speaks to commander during shura at Afghan National Police station, Zabul Province

the 21st century. The purpose of this article is to highlight the security cooperation potential that organizations could use to meet our nation's capacity-building strategic objectives, identify shortfalls in doctrine and authorizations, and propose solutions.

Doctrine and Authorities Mismatch

The global nation-state system that was established by the Treaty of Westphalia in 1648 assumes that international action occurs solely through the state. Unfortunately, in today's security environment, violent nonstate actors are increasingly operating from ungoverned spaces, with an expanding capacity to threaten international security and stability. These destabilizing elements blur the traditional distinction between law enforcement and warfare and create a gray area between routine policing activities and international armed conflict. Hence the global system, which has worked so well for over 360 years, might fray if the international community allows terrorists to thrive in the unregulated areas within sovereign states' borders. The international community acknowledged the danger of these transnational actors in United Nations (UN) Security Council Resolution 1373, where it called on all states to deny safe haven to those committing or facilitating terrorist acts.¹ Unfortunately, not all states are able to govern the entirety of their territories, creating the strategic dilemma of combating adversaries within nations with which we are not at war.

Since the end of World War II, the United States has fulfilled the role of security capacity builder. President Barack Obama reaffirmed this role in the May 2010 National Security Strategy, which states that Washington will support new UN frameworks and capacities for countering transnational threats to include counterterrorism. Specifically for Iraq, the National Security Strategy provides the goals of denying al Qaeda safe haven and building a positive partnership with the government of Iraq.²

The U.S. Government began its war termination and transition from a DOD-led mission to a State Department-led mission with a Security Cooperation Organization (SCO) subordinate to the chief of mission as combat operations ended. Accordingly, the Office of Security Cooperation-Iraq (OSC-I)

Security Cooperation Doctrine and Authorities Closing the Gaps

By ROBERT L. CASLEN, JR., F. DEAN RAAB,
and GEOFFREY ADAMS

The challenges we face are more complex than ever, and so are the responses needed to meet them. That is why we are building a global architecture that reflects the realities of the 21st century.

—Former Secretary of State Hillary Clinton

Two factors shape all discussions on security cooperation. First, when the Department of Defense (DOD) revised its security cooperation doctrine, it did so assuming a relatively unrestricted environment. Second, the Arms Export Control Act and the Foreign Assistance Act, statutory authorities supporting U.S. security cooperation with foreign governments, were largely developed during the Cold

War. The former's broad construct does not fully account for statutory authorities and the constraints of fiscal resources while the latter does not account for current global realities. Taken in combination, these two conditions limit the ability of the United States to use security cooperation for achieving its objectives in fragile or failing states. The resulting disconnect creates varied policy interpretations and gaps that must be closed for effective security cooperation in

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stood up on October 1, 2011, 2½ months prior to the withdrawal of U.S. forces in mid-December 2011. The OSC-I mission was to conduct security cooperation activities in order to build partner capacity in support of the developing strategic partnership with a stable, self-reliant, and regionally integrated Iraq. This mission fully supports the strategic vision described by the Commander in Chief in his “Responsibly Ending the War in Iraq” remarks at Camp Lejeune on February 27, 2009, and further endorses his letter on January 3, 2012, which served as the preface to *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. President Obama states in his letter, “In contrast to the murderous vision of violent extremists, we are joining with allies and partners around the world to build their capacity to promote security, prosperity, and human dignity.”³

As an SCO, OSC-I’s mission also nested well with DOD’s guidance, which stated, “Whenever possible, we will develop innovative, low-cost, and small-footprint approaches to achieve our security objectives, relying on exercises, rotational presence, and advisory capabilities.”⁴ But it is not enough for an SCO to integrate its mission with DOD; it must integrate with the State Department’s strategic plan because State executes foreign policy with DOD in a complementary, supporting role.

The State Department and U.S. Agency for International Development (USAID) strategic plan for fiscal years (FYs) 2007–2012 outlines how they planned to achieve U.S. strategic goals:

Responsible governments must be able to deal with threats within their own borders and address international problems in partnership with the United States and others. Through security cooperation, including arms transfers, we help partners develop the capability to operate with us and other like-minded nations to protect peace, restore security, and when necessary, to fight and win wars. We will develop and maintain effective security relationships with other countries and international organizations. We will build strong partnerships through robust political-military activities such as defense trade and export control regimes; arms control, nonproliferation, and disarmament agreements and verification protocols; international treaties, alliances, and burden-sharing agreements; security assistance programs; international

*exercises; and active confidence-building measures. We will build the capacity of partners to counter regional threats. We will support efforts to strengthen partner nations’ law enforcement, internal defense, and border and maritime security capabilities. We will support the professionalization and accountability of law enforcement institutions, including border security, and internal defense and military forces.*⁵

In order for DOD and the State Department to meet their objectives, the OSC-I strategic plan included four lines of effort. The first was to generate the Iraqi security forces (ISF) principally through the Foreign Military Sales program. The second was to train these forces both operationally and within the institutional training base.

the OSC-I mission was to build partner capacity in support of the developing strategic partnership with a stable, self-reliant, and regionally integrated Iraq

The third was to build a professional ISF by developing its leaders through military education, ethics, doctrine, and lessons learned. The fourth was to facilitate Iraq’s reintegration into the region as a responsible security partner through U.S. Central Command’s regional exercise program.

This four-pronged strategy was designed to enable OSC-I to complete all of its security assistance and security cooperation tasks in support of the overall strategic goals of the United States. Yet outdated statutory authorities not designed for today’s operating environment hinder security cooperation doctrinal task implementation. This doctrine and authorities mismatch has impeded implementing necessary “ways and means” to achieve strategic ends.

DOD must analyze and more strictly define its security cooperation doctrine, which is presently spread over numerous publications, regulations, and manuals. DOD Directive 5132.03 defines *security cooperation* as “activities undertaken by the Department of Defense to encourage and enable international partners to work with the United States to achieve strategic objectives. It includes all DOD interactions with foreign defense and security establishments.”⁶ Joint Publication (JP) 1-02 defines *security cooperation* as “all Department of

Defense interactions with foreign defense establishments.”⁷ One quickly notices that the joint publication omits the phrase “and security” from its definition, which restricts security cooperation to a nation’s traditional military forces and excludes other security forces, such as federal police, which may also have a role in that nation’s defense.

Language modifications such as this appear minor, but they have large implications for OSC-I as it attempts to fulfill President Obama’s call to deny safe havens for al Qaeda and build strong, enduring partnerships. For instance, the Iraqi Counterterrorism Service (CTS) is a military force separate from Iraq’s Ministry of Defense. However, under joint doctrine, OSC-I is limited in its ability to support the CTS because legal authorities support JP 1-02’s narrower defi-

nition, not the broader definition within the DOD Directive, which challenges OSC-I’s ability to equip, advise, and train a security force that is organized outside Iraq’s Ministry of Defense. This question of doctrinal responsibility further aggravates the debate about statutory authorities that will be highlighted shortly.

The Defense Institute of Security Assistance Management refers to *security cooperation* as “an umbrella term that is loosely defined and encompasses a variety of programs.”⁸ Those programs are not centrally managed. The most comprehensive list of security cooperation activities can be found in JP 3-22, *Foreign Internal Defense*, and the list finishes with the vague “other programs and activities.”⁹ Competing doctrine, subject to varied interpretations, adds to the confusion among DOD and State Department policymakers as they attempt to define OSC-I’s doctrinal responsibilities and its subsequent connection to legal authorities.

To resolve this issue, the first step would be for the Joint Staff to collate the doctrine for security cooperation activities into one comprehensive publication and assemble a team of defense professionals with experience in SCOs to analyze the doctrine to ensure it is consistent with law

and that it sufficiently supports the goals of the current national strategy. Once DOD has completely and definitively identified its doctrinal requirements, it can turn the doctrine over to the Under Secretary of Defense for Policy and DOD's General Counsel to determine if the current policies and laws authorize the tactics and procedures DOD needs to perform in order to achieve the strategic objectives, which brings us to the issue of gaps in the authorities.

Gaps

The second problem with security cooperation support involves inadequate existing legal authorities. The Arms Export Control Act and the Foreign Assistance Act, the main sources for OSC-I's Title 22 authorities, were both developed during the Cold War. They remain relevant for stable countries, but they are insufficient for security cooperation activities in fragile or failing states. Security cooperation activities in stable states support a materiel focus on force modernization. In fragile and failed

of the Ministry of Defense forces and outside the capabilities of the Ministry of Interior forces. Transnational terrorist groups can overwhelm traditional police forces, particularly a nascent internal security capability in an emerging democracy. This is especially true in Iraq, where groups such as al Qaeda in Iraq and Asaib Ahl al-Haq need to be met by a paramilitary internal security force. Iraq's burgeoning CTS requires training and equipping, and, as mentioned earlier, OSC-I and its predecessor organizations have been powerless to assist them without special legislative authority. While ISFF filled the void and bridged this statutory gap, a long-term solution would best support SCOs and U.S. strategic goals.

Absent ISFF or other special authorities, all OSC-I training and advisory missions involving uniformed military personnel would cease. This fact reflects the inadequacies of the current statutory authorities, which support a robust security assistance program with Foreign Military Sales as its cornerstone but do not support

To avert segmentation in U.S. support caused by a gap in the 2012 special authorities, DOD responded by authorizing the use of the Combatant Commander Initiative Fund (CCIF) to continue the training program, which was intended as a short-term solution until Congress passed the National Defense Authorization Act of 2013. The use of CCIF allowed the continuation of the OSC-I training mission, but at the cost of approximately 20 percent of OSC-I personnel because using the CCIF did not permit as broad a training mission as authorized under the ISFF. Moreover, there is a statutory limit of \$5 million that may be used to train foreign military forces worldwide. Through hard work, unsung professionals within DOD, U.S. Central Command, and OSC-I temporarily resolved the problem, but this was yet another example of a temporary authority providing short-term relief to a systemic problem. A full-time solution is needed. Since the Arms Export Control Act and Foreign Assistance Act cannot meet America's 21st-century postconflict requirements, we must develop legislation that enables SCOs to meet the future challenges that face our nation. Said another way, Congress needs to rewrite these statutes in keeping with the new global paradigm. The June 2011 National Strategy for Counterterrorism describes this solution. It states that the U.S. legal framework must "maintain sufficient flexibility to adjust to the changing threat and environment."¹⁰ Today it does not.

failed and fragile frontline states require the full weight of a security cooperation program encompassing both Title 10 and Title 22 provisions

states, force modernization is not enough. Those states require an SCO empowered to implement the force generation model to rebuild their military institutions. In recognition of this fact, Congress passed the Iraq Security Forces Fund (ISFF) in 2006, which authorized U.S. forces to train and assist the ISF, which include counterterrorism forces, conventional military forces, and federal police. ISFF was the only authority that allowed OSC-I to complete all of the security cooperation tasks needed to produce President Obama's vision for Iraq, but regrettably it expired in September 2012 before all the strategic objectives were reached and an adequate follow-on authority could be legislated.

An additional complaint concerning the existing legal authorities is the statutory distinction between the Ministries of Interior and Defense and internal and external security, which has not kept pace with the realities of the global environment. Many transnational actors with malicious intent operate in gray areas outside the legal reach

an enduring security cooperation program partnered with a frontline state. The failure of Congress to pass the National Defense Authorization Act before the end of FY12 was an additional inhibiting factor, as the interim Continuing Resolution did not provide the authorities needed for OSC-I to continue its security cooperation mission. This reflects another limitation to the reliance on special congressional authorities, which require annual congressional debate and renewal. Furthermore, both DOD and State have expressed a reluctance to bring the special authorities argument to Congress year after year. If the debate and approval process is accomplished in a seamless and timely manner, it does not hamper security cooperation or security assistance activities and may even be beneficial; however, if they are not completed in an expeditious manner, security assistance programs could suffer breaks in service and security cooperation missions could be fragmented. Either effect could signal a wavering commitment to our partners, reducing mutual trust.

Blurred Title 10 and Title 22 Distinction

The third problem with today's security cooperation support is the misconception that the Foreign Military Sales program, under the auspice of the Title 22 security assistance mission, can continue to serve as the cornerstone of our allied partnerships. That was true for our support of Cold War allies who already had functioning governments and military forces, but no longer. Today, the United States finds itself engaged with failed and fragile frontline states that lack established government institutions and robust military capabilities. Such states require the full weight of a security cooperation program encompassing both Title 10 and Title 22 provisions to generate forces and build military institutions that embody a professional ethos and are imbued with democratic values, are respectful of indi-



U.S. Navy (Nathan Potter)

Liberian coast guardsman discusses operations with U.S. Navy officer during exercise Saharan Express 2012 at counternarcotics and maritime security interagency operations center in Praia, Cape Verde

vidual and human rights, follow the rule of law, and are subordinate to civilian authorities. Until that conversation occurs between military and civilian decisionmakers, the laws will remain inflexible and will needlessly constrain SCOs. Current statutes must be amended to permit SCOs to adjust to the situation on the ground, implementing a mixture of Title 10 and 22 programs in conjunction with their government partners as they work to build partner capacity in fragile or failed states.

If the dynamic nature of the contemporary environment and the flexibility required to operate within that environment are not acknowledged, SCOs will be plagued by differing visions of their roles and responsibilities, which will lead to ineffective planning and resourcing. OSC-I suffered because of these varied opinions as it accepted the mantle from United States Forces–Iraq (USF-I).

During the construction of OSC-I in 2011, a fundamental planning assumption went uncorrected even when proved false. USF-I planners originally assumed that

negotiations with Iraq for a Title 10 follow-on force would be successful and structured the organization to direct up to 10,000 soldiers. When that planning factor withered away, due primarily to the inability to conclude a status of forces agreement guaranteeing legal immunity to the follow-on force, planners had no guidelines to readjust the organization's structure to perform the required command and staff functions or the authority to redefine its endstate objectives commensurate to the structure it possessed. Critical functions such as transportation planning, movement coordination, and communications architecture development were orphaned when USF-I support staff departed. Instead of managing its primary security cooperation and assistance functions, OSC-I was forced to pull personnel from its Title 22 security assistance and cooperation missions to perform its internal Title 10 enabling capabilities.

The blurred Title 10 and Title 22 distinction was even convoluted between U.S. Central Command's component commanders. Army Central did not believe it had the

authority to provide Title 10 administrative support to OSC-I in such areas as cashing checks, direct exchanging of worn military uniforms, or even providing fixed-wing distinguished visitor support despite the fact that 75 percent of the organization was present under Title 10 authorities conducting Title 10 security cooperation tasks. Yet U.S. Air Forces Central believed it had the legal authority and sent a finance team to support OSC-I for 6 months at a time along with flying a C-130 ring route mission to Iraq two to three times a week.

As the organization's structural shortcomings were revealed during execution, continued disagreements over OSC-I's security cooperation responsibilities inhibited the resourcing of potential organizational solutions. With Kurd-Arab tensions increasing in Iraq, the U.S. Mission Iraq recognized that the combined security mechanisms (CSM) could serve as a confidence-building measure, acting as an avenue for security forces to cooperate and discuss pertinent issues. Ambassador James Jeffrey and the USF-I commander, General Lloyd Austin III

(USA), proposed a joint manning document for OSC-I that included positions intended for those important military-to-military discussions. The Kurds and Arabs both leverage their relationships with the U.S. military to seek military advice and communicate with one another. The Kurds trust the U.S. military, while the Arabs use the military

SCOs, particularly for organizations such as OSC-I, operating in nonpermissive environments and transitioning from a decade of armed conflict. Furthermore, after a decade of operating under special authorities and unprecedented interagency cooperation that saw DOD conducting a police training program (a function normally executed by

needs, it must build the security capacities of its partners. Current challenges to security and stability necessitate changes in America's system of providing that capacity. Our SCOs face those new challenges daily as they strive to conduct security cooperation activities to build partner capacity in support of developing strategic partnerships. Even in a nonpermissive environment, all of those challenges can be met with updated, relevant statutes properly aligned with doctrine. Every governmental agency involved in developing and stabilizing fragile or failed states, particularly transitioning after war termination, should consider OSC-I's experiences as a basis to verify that its doctrinally sound, government-sanctioned support capabilities match the support requirements of the 21st century. By having effective authorities that support the breadth of an SCO's doctrinal tasks of training, advising and assisting, or supporting a State Department diplomatic request, we will get the partners we want. Without them, we will get the partners we deserve. **JFQ**

Congress should recognize that effective security cooperation requires the resources of both DOD and the State Department

to indirectly communicate with the Kurds without legitimizing the Kurdistan Regional Government. Viewing this engagement as a diplomatic mission, DOD's General Counsel concluded that OSC-I lacked legal authority for Title 10 support to the CSM, believing that the responsibility resided at the U.S. Embassy's Political-Military Section. Unfortunately, the State Department would not resource the task, and when the Kurd-Arab conflict erupted, the new Ambassador directed OSC-I support to enable the military-to-military discussions, which created an unscheduled personnel requirement that had to be resourced internally.

The lack of clarity regarding OSC-I status and the ability of DOD to provide Title 10 support to OSC-I arose when the State Department directed transfer of all OSC-I training sites to the government of Iraq and the transition of all base life support and security functions to the Foreign Military Sales contractors. OSC-I had previously closed the Kirkuk training site in September 2012. For that mission, U.S. Central Command provided logistical support through an exception to policy under Operation *New Dawn* authorities, which continued through FY12, even though USF-I was deactivated in December 2011. However, the Office of the Secretary of Defense terminated Operation *New Dawn* authorities at the end of FY12, which prevented DOD and U.S. Central Command from providing the same logistical support to the subsequent site transfers despite the fact that almost everything to be disposed of was legacy USF-I equipment and DOD was issuing disposition instructions for the remaining equipment at the sites.

This example illustrates that current budgetary and funding rules unnecessarily restrict logistical support to traditional

the State Department) and Foreign Service officers serving on Provincial Reconstruction Teams alongside Active-duty Servicemembers (a postconflict stability operation traditionally executed by DOD), the abrupt postconflict return to a traditional Title 10 and Title 22 divide is a significant step backward for both agencies. Congress should recognize that effective security cooperation requires the resources of both DOD and the State Department and allows greater use of DOD resources to support organizations such as OSC-I, particularly in a postconflict transition paradigm.

We must achieve that flexibility. During a speech that former secretary of Defense Robert Gates gave to the assembled body of future military leaders at West Point on February 25, 2011, he warned, "Any future defense secretary who advises the president to again send a big American land army into Asia or into the Middle East or Africa 'should have his head examined.'"¹¹ The implication for us is to think of how to fight wars differently—specifically how to address the strategic dilemma of defeating an adversary who resides within a country with which we are not at war. One answer to this challenge is mentioned in DOD's latest strategic guidance, *Sustaining U.S. Global Leadership*, which states, "Whenever possible, we will develop innovative, low cost, and small-footprint approaches to achieve our security objectives, relying on exercises, rotational presence, and advisory capabilities."¹² These small footprint capabilities exist within our SCOs today, but we have to ensure they have the right doctrine, are organized for their missions, are resourced to accomplish their objectives, and have the proper authorities to enable those resources.

If America truly wants to forge a new global architecture to provide for its security

NOTES

¹ United Nations Security Council Resolution S/Res/1373, September 28, 2001, 2.

² *National Security Strategy* (Washington, DC: The White House, May 2010), 19.

³ *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Department of Defense, 2012), preface.

⁴ *Ibid.*, 3.

⁵ Department of State and U.S. Agency for International Development, *Strategic Plan: Fiscal Years 2007–2012, Transformational Diplomacy* (Washington, DC: Department of State, revised May 7, 2007), available at <www.state.gov/s/d/rm/rls/dosstrat/2007/>.

⁶ DOD Directive 5132.03, "DOD Policy and Responsibilities Relating to Security Cooperation," available at <www.dtic.mil/whs/directives/corres/pdf/513203p.pdf>. Emphasis added.

⁷ Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: The Joint Staff, November 8, 2010), 287. Emphasis added.

⁸ Jeffrey S. Grafton, ed., *The Management of Security Cooperation*, 31st ed. (Wright Patterson AFB, OH: Defense Institute of Security Assistance Management, February 2012), 4-3.

⁹ JP 3-22, *Foreign Internal Defense* (Washington, DC: The Joint Staff, 2007), I-11.

¹⁰ *National Strategy for Counterterrorism* (Washington, DC: The White House, June 2011), 6.

¹¹ Robert M. Gates, speech, West Point, NY, February 25, 2011.

¹² *Sustaining U.S. Global Leadership*.



Afghan National Army soldiers are briefed before live-fire exercise partnered with coalition special operations forces

Green-on-Blue Attacks Why “Insider” Violence Has Risen in Afghanistan

By ERIC JARDINE

Why has there been a rapid increase in so-called green-on-blue attacks in Afghanistan since 2011?

Put otherwise, why are members of the Afghan National Army (ANA) and Afghan National Police (ANP) increasingly targeting coalition forces? I argue that, while personally held individual-level motiva-

tions for attacks play a role, the underlying and systematic root cause of the relative increase in these attacks is a lack of counterinsurgent control over the territory and population of Afghanistan.

An Overview

First, the problem currently confronting coalition forces in Afghanistan is a

growing *absolute* and *relative* number of so-called green-on-blue attacks in recent years. Second, the growth of the indigenous security apparatus and lack of counterinsurgent control of the population and territory of Afghanistan are the most relevant variables in determining the increase in the relative rate of insider attacks. Third, a framework that systematizes the relationship between Afghan National Security Forces (ANSF) growth, counterinsurgent control over the population and territory of Afghanistan, and the occurrence of green-on-blue or insider attacks is offered. Finally, by using the proposed framework, it is possible to diagnose the source of the current problem and provide a prognosis for what will likely occur as Western forces begin to withdraw from the Afghan theater in 2014. In particular, I maintain that the source of this problem is one of sequencing. The United States and International Security Assistance Force (ISAF) expanded the indigenous security capacity before the span of counterinsurgent

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Table. Escalating Trend in Green-on-Blue (“Insider”) Attacks

	2008	2009	2010	2011	2012
Green-on-blue fatalities per year (% of all fatalities in parentheses)	2 (< 1)	12 (2)	16 (2)	35 (6)	61 (15)
Green-on-blue injuries per year	3	11	1	34	81
Total insider attacks per year	2	5	5	16	44
Total estimated ANSF near year's end	147,910	195,089	266,389	323,410	344,108
Ratio of green-on-blue attacks to average ANSF size	1 : 73,955	1 : 39,018	1 : 53,278	1 : 20,213	1 : 7,821

Sources: Bill Roggio and Lisa Lundquist, “Green-on-Blue Attacks in Afghanistan: The Data,” *The Long War Journal*, August 23, 2012. Figures on the size of the Afghan National Security Forces were taken from Ian S. Livingston and Michael O’Hanlon, *Afghanistan Index* (Washington, DC: Brookings Institution, May 16, 2012), 6.

control over the territory and population was broad enough to limit the ability of the insurgency to coerce individuals into undertaking insider attacks.¹ Moreover, as Western forces withdraw approaching 2014, the problem of insider attacks is likely to grow even more pronounced.

Examining the Problem

Current U.S. and ISAF policy in Afghanistan places a large emphasis on building up the indigenous security apparatus of the Afghan state, including both the ANA and the ANP. For example, Seth Jones, a RAND Corporation expert on Afghanistan, posits, “The United States should focus its resources on developing capabilities that help improve the capacity of the *indigenous government* and its security forces to wage counterinsurgency warfare.”² Likewise, the preeminent counterinsurgency theorist David Kilcullen notes, “The essential strategic problem for Western intervention in Afghanistan is . . . less about directly defeating the Taliban and more about building an Afghan state that can handle the Taliban.”³ Indeed, General Stanley McChrystal’s “Commander’s Initial Assessment” of the war in Afghanistan insists that to achieve success in Afghanistan, both the quantity and the quality of the ANA and ANP need to rise.⁴

Both the United States and ISAF have signaled that they will withdraw their troops in 2014. To compensate for the diminished international presence, the United States and ISAF have invested considerable time, money, and resources into building up the ANSF. Indeed, since the end of 2003 when the total ANSF consisted of approximately 6,000 personnel, both the ANA and the ANP have grown significantly. By March 2012,

the total number of ANSF personnel, including forces from the Ministry of Defense and Ministry of the Interior, had grown to some 344,000.⁵ Despite problems of personnel retention and overall troop quality, the ANSF has grown quite rapidly.

Yet concomitant with the rise in security forces is a rise in green-on-blue attacks—attacks where Afghan security forces (also known as “insiders”) target coalition personnel. By September 2012, for example, Afghan security forces killed 18 British soldiers, while a roughly equal number were wounded in similar attacks.⁶ Indeed, according to some fairly comprehensive statistics compiled by *Long War Journal*, 72 green-on-blue attacks occurred from 2008 to the end of 2012. Of all the casualties suffered by coalition forces in 2012, an estimated 15 percent were caused by Afghan forces attacking U.S. and ISAF personnel.⁷ As outlined in the accompanying table, the *absolute* number of green-on-blue attacks has been escalating since 2008, with more insider attacks and more coalition fatalities each year.

Given the expansion of the ANSF, an absolute increase in the number of insider attacks would be expected, as more soldiers lead to more chances for insider attacks, just as larger cities tend to have more murders and violent crimes. In this sense, at least part of the increase in green-on-blue attacks is, as British Brigadier General Doug Chalmers points out, “statistical.”⁸ What matters more in some ways is the *relative* rate of green-on-blue attacks, or the number of insider attacks that occur relative to the number of Afghan security personnel. As illustrated in row 5 of the table, the relative number of attacks has been growing as well, with the ratio of

attacks to ANSF personnel growing steadily worse. For example, the ratio of green-on-blue attacks to soldiers fell from 1 attack for 73,955 ANSF personnel in 2008 to a startling 1 green-on-blue attack for 7,821 ANSF personnel in 2012. This means that in addition to an increase in the *absolute* number of attacks in recent months, the *relative* rate of attacks against coalition forces is rising as well. This trend begs the question of why.

Causes

In general, the rise in the *total* number of insider attacks against coalition forces is, I argue, a function of two variables: the number of indigenous troops and the extent of counterinsurgency control in Afghanistan. These variables interact to produce higher levels of insider attacks in both absolute and relative terms. The expansion of the indigenous security capacity of the Afghan state contributes primarily to the absolute increase in attacks. A low and potentially waning span of counterinsurgent control over the territory and population of Afghanistan contributes to the relative rise in attacks that have occurred since 2008.

At its core, the growing number of indigenous security personnel contributes to a higher *absolute* level of green-on-blue violence through personally held individual-level motivations, which are highly variable but can range from comparatively simple grievances over U.S. and ISAF actions to full-blown allegiance to the Taliban insurgency. As highlighted in row three of the table, the *absolute* number of green-on-blue attacks is rising. Moreover, for any given baseline level of discontent with U.S. and ISAF forces among the Afghan population, the growth of the ANSF should result in more people within the security apparatus who want to attack coalition forces.⁹ For instance, Lieutenant Colonel Charlie Maconochie writes, “The catalyst for the majority of insider attacks appears to be a mix of personal grievances, cultural disparities and psychological distress. The largely unreported number of attacks by Afghan soldiers on their own forces bears this out.”¹⁰ Individually held grievances provide the motive, but the expansion of the ANSF must happen before an aggrieved individual has an opportunity to enter the Afghan security apparatus to then undertake an attack.

An expanding number of indigenous security personnel also means more poten-

tial for insurgent infiltration. For example, Mullah Mohammad Omar, the leader of the Taliban, reportedly claimed on August 16, 2012, that the perpetrators of many of the green-on-blue attacks were “cleverly infiltrated in the ranks of the enemy according to the plan given to them last year.”¹¹ Invariably, a larger security apparatus spreads thin the counterinsurgency’s finite resources for screening, monitoring, and controlling new recruits, which makes increased insurgent infiltration more likely.

In these myriad ways, rapidly building up the ANSF contributes to an increased number of insider acts. Yet the evidence over the 2008 to 2011 period suggests that the baseline level of grievances within the Afghan population is declining. Moreover, according to annual surveys conducted by the Asia Pacific Foundation, from 2008 through 2011 at the national level, an increasing number of Afghans indicated that Afghanistan is heading in the “right” direction.¹² In 2008, only 38 percent of respondents indicated that the country was heading in the right direction. This number grew to 42 percent in 2009, 47 percent in 2010, and 46 percent in 2011. Admittedly, the number of people expressing the view that the country was moving in the wrong direction rose to 35 percent in 2011, but only after declining from 32 percent in 2008 to 27 percent in 2010. Basically, at one level at least, the national statistics imply that the baseline level of grievance is likely improving over time, which means that it cannot really account for the *relative* increase in green-on-blue attacks in recent years. If anything, as grievances decline, the *relative* rate of insider attacks against U.S. and ISAF soldiers should decline, which is the opposite of what is happening.

Overall, more indigenous security forces will likely lead to more green-on-blue attacks because more aggrieved people will enter the security apparatus and there will be more chances for direct insurgent infiltration. However, normalized around the number of security forces on active duty, the *relative* rate of attacks likely would not change unless the baseline level of grievances in the local population changed for the worse or U.S. and ISAF screening measures were overwhelmed by an influx of new recruits. As the data presented at least tentatively illustrate, grievances are diminishing over time at the national level even as the *relative* number of green-on-blue attacks is rising.



U.S. Navy (Jacob Dillon)

During Afghanistan Peace and Reintegration Program, insurgent commander turns in weapon and urges others to follow and renounce their affiliation with insurgency

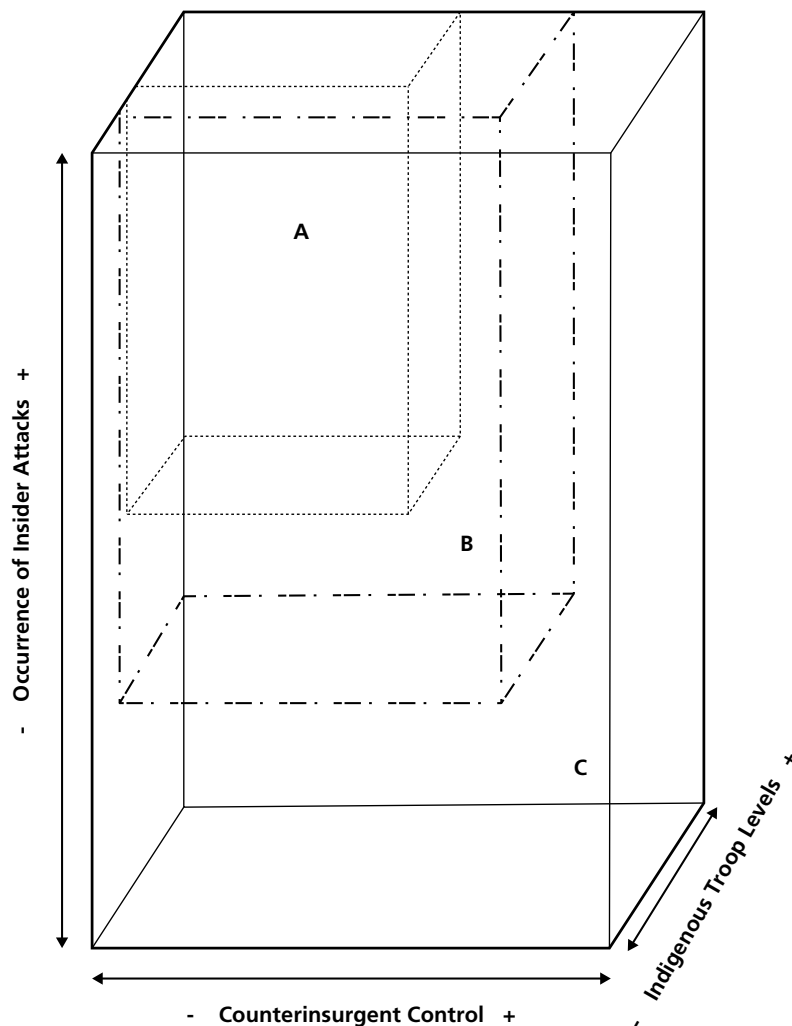
The most likely driver of the *relative* increase in green-on-blue attacks is the changing span of counterinsurgent control over the population and territory of Afghanistan.¹³ The level of control that a counterinsurgency can exercise in a territorial area affects the actions of both the population and the insurgency.¹⁴ People generally collaborate with the counterinsurgency in areas of high counterinsurgent control and refuse to do so in contested or insurgent-controlled areas because the population fears it will be punished by insurgents. If the occurrence of security incidents is taken as a proxy for the extent of counterinsurgent control, the scope of control exercised by ISAF, the United States, and the Afghan government is fairly minimal and perhaps even growing worse over time, as security incidents are rising yearly in many parts of the country.¹⁵ Waning counterinsurgent control over the territory and population is problematic because it places a systematic constraint on the allegiance of both incoming and current ANSF personnel.

Generally, as the counterinsurgent’s span of control over the territory and population in Afghanistan declines over time, the ability of the insurgency to credibly threaten and punish the population increases. As the vulnerability of ANSF recruits’ families and dependents rises, so does the degree to which ANA and ANP personnel are susceptible to being coerced into launching an attack against coalition forces.¹⁶ Indeed, General John Allen of the U.S. Marine Corps recently conceded that roughly 15 percent of insider attacks are attributable to Taliban coercion of the security personnel or their families.¹⁷ Hence, the limited span of counterinsurgent control in Afghanistan coupled with the expanding size of the indigenous security capacity result in higher levels of insider attacks in both *absolute* and *relative* terms.

Framework for Diagnosis and Prognosis

Higher levels of green-on-blue attacks are caused by two factors: growing indigenous troop levels and limited counterinsurgent

Figure. Indigenous Security Capacity, Counterinsurgent Control, and Occurrence of Insider Attacks on Coalition Personnel



control. The mechanism that transforms expanding indigenous troop levels into increased insider attacks is the individual-level motivations of recruits and current personnel. More indigenous troops mean more opportunities for disaffected individuals to join the ANSF and target coalition forces. Likewise, a larger ANSF recruitment process results in a greater chance that insurgents will be able to infiltrate the process. An increase in indigenous troop levels is therefore definitely related to higher levels of green-on-blue attacks in an absolute sense. All else being equal, as the size of Afghanistan's indigenous security apparatus increases, so will the total number of insider attacks.

The span of counterinsurgency control over the territory and population of Afghanistan involves the extent to which factors external to the individual—primarily

the insurgency's ability to coerce individuals through their families and dependents—can motivate a member of the Afghan security apparatus to launch a green-on-blue attack. When counterinsurgent control is low, the dependents and families of ANSF members are vulnerable to coercion and can be credibly threatened by the insurgency. In that sense, counterinsurgent control is negatively related to more insider attacks. All else being equal, as the forces of the counterinsurgency expand their span of control over more of the territory and population of Afghanistan, the *relative* number of green-on-blue attacks should fall.

The accompanying figure outlines the relationship between expanding indigenous force size (z-axis), counterinsurgent control (x-axis), and insider or green-on-blue attacks (y-axis or dependent variable).¹⁸

Given that a large number of indigenous troops is necessary for Western forces to leave Afghanistan, counterinsurgency control represents the most important axis. In zone A of the figure, the lowest value on the counterinsurgent control axis is represented—meaning that the counterinsurgency controls the lowest amount of the territory and population of Afghanistan. Assuming that indigenous troops are at a medium to high level, low counterinsurgent control results in a higher level of insider attacks—a high value on the y-axis. If counterinsurgent control expands—a movement to the right on the x-axis—then for any given level of indigenous security capacity, the number of insider attacks should fall. Indeed, if counterinsurgent control of Afghanistan approached a maximum value, then even the highest level of indigenous troop levels would not necessarily lead to higher levels of green-on-blue attacks.

In some ways, counterinsurgent control can be furthered by increasing indigenous troop levels, so the x- and z-axes are not completely independent. However, a counterinsurgency's span of control over territory and population is the product of more than just security force levels, so a movement along the z-axis (growing indigenous troop levels) will not necessarily produce a similar movement along the x-axis (growing counterinsurgent control).¹⁹ This means that an expansion of the counterinsurgency's span of control will usually lag indigenous troop development. In the context of the framework in the figure, there will be a movement along the z-axis (increased indigenous troops) that is greater than the movement along the x-axis (increased counterinsurgent control). The implication is that there will also be an increase upward along the y-axis, resulting in more green-on-blue attacks.

In sum, for any given level of indigenous troops, the smaller the span of counterinsurgent control of the territory and population, the higher the *relative* number of insider attacks. Conversely, the higher the level of counterinsurgent control, the lower the level of insider attacks.

Policy Conclusions

The proposed framework for understanding the drivers of green-on-blue attacks has both diagnostic and prognostic implica-

tions. In particular, the framework can diagnose why there is currently an upswing in the *relative* number of green-on-blue attacks. It can also provide rough predictions of what will happen as Western countries reduce their presence in Afghanistan in 2014.

Diagnostically, the framework has interesting implications for both current and future state-building and counterinsurgency efforts. It suggests that absent a sufficiently high level of counterinsurgent control of the population and territory of an area of operation, building indigenous security capacity is likely to result in a growing relative number of insider attacks. This diagnosis fits with what is currently happening in Afghanistan. While the indigenous security capacity of the Afghan state has grown significantly, the span of counterinsurgent control of the territory and population has likely waned or at least remained fairly low. The result is a growing relative number of green-on-blue attacks as the insurgency is able to coerce individuals within the ANSF into undertaking insider attacks.

For current and future indigenous capacity development, the proposed framework suggests that increasing the span of counterinsurgent control must precede any significant expansion in indigenous security capacity. Otherwise, higher levels of green-on-blue attacks are likely. To the extent the framework accurately describes the relationship between counterinsurgent control, indigenous security capacity, and green-on-blue attacks, it is clear that the need to develop indigenous capacity before handing over all security operations to the ANSF by 2014 has resulted in a rapid movement along the z-axis without a preceding or concomitant movement along the x-axis. The result, as expected, is an increased and rising number of green-on-blue attacks.

The framework can also provide a prognosis about what will happen with green-on-blue attacks as Western forces withdraw. Obviously, as the number of Western troops declines, the ability for ANSF personnel to launch attacks on Western counterinsurgents will fall. However, ANSF forces might still be targeted by elements within the indigenous security apparatus and the logic, as outlined in the framework above, should still apply. Since the span of counterinsurgent control over the population and territory of Afghanistan will likely decrease as Western forces are

withdrawn, the predicted expectation would be that the number of intrasecurity force attacks (green-on-blue and green-on-green) should probably rise further still.

Overall, the framework developed here has implications for both future counterinsurgency missions and the ongoing mission in Afghanistan. Counterinsurgent control of the population and territory of a theater of operations is crucial in limiting green-on-blue attacks because it minimizes the external motivator of such attacks, which revolves around the insurgency's ability to coerce the families and dependents of indigenous forces into launching attacks. Put another way, building up the ANSF without first establishing a high enough level of effective control over Afghanistan has resulted in another avenue through which the insurgency is able to attack coalition forces. Counterinsurgency is a slow, tiresome business, and attempting to build indigenous forces without first beginning to win the war simply results in more problems. **JFQ**

NOTES

¹ Those familiar with L.F. Urwick's concept of a "manager span of control" will recognize the turn of phrase used in this article. See L.F. Urwick, "The Span of Control," *Scottish Journal of Political Economy* 4, no. 2 (1957), 101–113.

² Seth Jones, *Counterinsurgency in Afghanistan* (Santa Monica, CA: RAND, 2008), xi. Emphasis in the original.

³ David Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (New York: Oxford University Press, 2009), 46.

⁴ Stanley A. McChrystal, *Commander's Initial Assessment* (Kabul: Headquarters International Security Assistance Force [ISAF], August 30, 2009), available at <http://media.washingtonpost.com/wp-srv/politics/documents/Assessment_Redacted_092109.pdf>.

⁵ Ian S. Livingston and Michael O'Hanlon, *Afghanistan Index* (Washington, DC: Brookings Institution, May 16, 2012), 6, available at <www.brookings.edu/~media/programs/foreign%20policy/afghanistan%20index/index20120516>.

⁶ Charlie Maconochie, "Green on Blue Attacks Must Not Deter Us in Afghanistan," *The Telegraph* (London), September 18, 2012, available at <www.telegraph.co.uk/news/worldnews/asia/afghanistan/9550536/Green-on-Blue-attacks-must-not-deter-us-in-Afghanistan.html>.

⁷ Since the end of 2012, the number of attacks has risen to a total of 80, as of July 2013. For a breakdown of the statistics, see Bill Roggio and Lisa Lundquist, "Green-on-Blue Attacks in Afghanistan: The Data," *The Long War Journal*,

August 23, 2012, available at <www.longwarjournal.org/archives/2012/08/green-on-blue_attack.php>.

⁸ James Kirkup, "Britain's Afghan Commander: Rising Threat of 'Green on Blue' Attacks," *The Telegraph* (London), October 23, 2012, available at <www.telegraph.co.uk/news/uknews/defence/9628586/Britains-Afghan-commander-rising-threat-of-green-on-blue-attacks.html>.

⁹ Michael Edwards, "Afghanistan Green on Blue Attacks Continue," *PM* (Australia), audio and transcript, October 11, 2012, available at <www.abc.net.au/news/2012-10-11/afghanistan-green-on-blue-attacks-continue/4308638?section=world>.

¹⁰ Maconochie.

¹¹ Roggio and Lundquist.

¹² All Asia Pacific Foundation surveys on Afghanistan are available at <<http://asiafoundation.org/country/afghanistan/2011-poll.php>>.

¹³ See Eric Jardine, "Controlling Territory and Population During Counterinsurgency: State Security Capacity and the Costs of Power Projection," *Civil Wars* 14, no. 2 (June 2012), 228–253.

¹⁴ For the seminal work on control and the behavior of the population, see Stathis Kalyvas, *The Logic of Violence in Civil War* (New York: Cambridge University Press, 2009).

¹⁵ For data on security incidents in Afghanistan's provinces see, for example, the provincial indicators page, available at <www.cimicweb.org/AfghanistanProvincialMap/Pages/default.aspx>.

¹⁶ For a lucid study of the drivers of indigenous force performance, including how the context of the indigenous units' recruitment matters and can lead to insider violence, see Yoav Gortzak, "Using Indigenous Forces in Counterinsurgency Operations: The French in Algeria, 1954–1962," *Journal of Strategic Studies* 32, no. 2 (April 2009), 307–333.

¹⁷ See, for example, Thom Shanker, "General Notes Taliban Coercion in Some Attacks on Troops," *The New York Times*, August 23, 2012, available at <www.nytimes.com/2012/08/24/world/asia/general-notes-taliban-coercion-in-some-attacks-on-troops-in-afghanistan.html>.

¹⁸ Although our topics and axes differ, I first came across the idea of modeling conceptual ideas in three dimensions by reading the great work of Jeff Goodwin on revolutionary movements. See Jeff Goodwin, *No Way Out: States and Revolutionary Movements, 1945–1991* (Cambridge: Cambridge University Press, 2003).

¹⁹ Jardine.



Arleigh Burke-class Aegis USS Higgins under way with USS Carl Vinson Carrier Strike Group

NATO Missile Defense and the View from the Front Line

By KAREN KAYA

At the November 2010 North Atlantic Treaty Organization (NATO) meeting in Lisbon, leaders of 28 nations gathered to chart the Alliance's future course. They identified three essential tasks for the Alliance going forward: collective defense, crisis management, and cooperative security.¹ They adopted a new strategic concept that laid out the Alliance's defense doctrine and vision for the 21st century. This called for a NATO that is more agile, capable, and cost-effective and that is able to defend its members against the full range of threats.

The new strategic concept is meant to guide the Alliance during the next 10 to 15 years as it restructures its forces according to new threat perceptions. The concept assesses that the greatest threats will come from the proliferation of nuclear weapons and other weapons of mass destruction and their means of delivery. It also recognizes that proliferation will be most acute in some of the world's most volatile regions. Based on this assessment, the concept foresees a significant increase in NATO's deterrence capability. One of the main tenets of that ambition is to develop a ballistic missile

defense (BMD) capability to pursue NATO's core task of collective defense. The Lisbon declaration states, "We will . . . develop the capability to defend our populations and territories against ballistic missile attack as a core element of our collective defense, which contributes to the indivisible security of the Alliance. BMD will be one element of a broader response to the threat posed by the proliferation of ballistic missiles."²

This is a significant shift. The former emphasis on protecting military units and facilities based on theater missile defense has shifted to the protection of NATO members' territories and populations based on territorial missile defense, signaling a broader, more comprehensive approach to security.

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In addition to the Cold War-era threat of proliferation of nuclear weapons and ballistic missiles, NATO faces threats today that were not present during that era including terrorist activities, cyber attacks against communication systems, threats against energy security, and piracy activities along sea trade routes. What also makes these new threats unique is that they no longer originate with rational actors such as the Soviet Union and therefore cannot be easily deterred. They come from irrational actors—governmental or nongovernmental—who use asymmetrical tactics and are willing to die; thus, they are increasingly hard to counter. They come from actors who will not differentiate between military and civilian targets. NATO's incentive to establish missile defense systems and its shift from protecting military bases to protecting populations and full territories is meant to counter these threats.

This represents another major transformation within the Alliance's posture. The focus is shifting from deterrence by mutually assured destruction or extended deterrence to deterrence by denial.³ The extended deterrence guarantee during the Cold War was meant to deter an attack on U.S. Allies with the message that such an attack would not be left unpunished, and would be met with nuclear weapons if necessary. In deterrence by denial, the message is that the United States and NATO will prevent an attack from reaching its target and, therefore, its political and military goal.

The Missile Defense Shield

President Ronald Reagan initially envisioned a missile defense shield project during the Cold War called the Strategic Defense Initiative (SDI). SDI was to use space technology to protect the United States from a nuclear attack. However, this project caused a crisis between the United States and Soviet Union in the 1980s, and it was eventually abandoned due to cost and to important steps taken in nonproliferation.

During President George W. Bush's term, the project came back on the agenda, and this time protection from Iran and North Korea was the goal. This plan foresaw the stationing of U.S. Patriot air-defense missiles in Poland and the planned deployment of supporting radar in the Czech Republic. Agreements were signed with both countries in 2008. This project was

suspended because it caused a rift both in U.S.-Russia and in NATO-Russia relations.⁴

President Barack Obama took a different approach to the project in an effort to avoid the previous problems. First, it was turned into a NATO project, which was to reduce the cost burden on the United States and divert emphasis away from the United States. Second, instead of the long-range antiballistic missile defense system, the project would take a phased approach and start with short- to mid-range defense missiles that could be launched from land or sea. It would evolve by 2020 to its ultimate capability of protecting the U.S. homeland from an intercontinental ballistic missile (ICBM) for the long term.⁵ This would protect the United States and its NATO Allies from any attack by North Korea, Iran, or Syria. Third, the NATO declarations regarding this project have all indicated a desire to cooperate with Russia in order to mitigate its concerns.

On September 17, 2009, as part of this phased approach, President Obama signed the European Phased Adaptive Approach (EPAA) document, which foresaw a missile defense system in a four-phase adaptive approach, with each phase building and improving on the technology of the previous one.

The Phased Approach

The European Phased Adaptive Approach, as originally adopted, entailed a short-term and immediate goal to defend against threats from tactical and short-range ballistic missiles (SRBMs) and expanded by phases to protecting from medium-range ballistic missiles (MRBMs) to intermediate-range ballistic missiles (IRBMs) and to eventually protect against ICBMs. The first three phases involve the protection of U.S. Allies in Europe against ballistic missile threats. The fourth phase, which was initially foreseen for 2020—then delayed to 2022—would protect the U.S. homeland against ICBMs, hitting them while they are in the Middle East or Europe. In March 2013, this phase was canceled after a decision to restructure missile defense plans and allegedly shift resources to protect against threats from North Korea.⁶

Phase One (Accomplished in the 2011 Timeframe). This phase deployed missile defense systems that were already available. It included the Standard Missile

3 (SM-3), a ship-based missile system used by the U.S. Navy and a part of the sea-based Aegis BMD System. This ship system uses an interceptor called Block IA, which is designed to intercept short- to intermediate-range ballistic missiles. This phase also includes the deployment of the Forward-based Mode Army Navy/Transportable Radar Surveillance System (AN/TPY-2) to address regional ballistic missile threats to Europe. Currently, the AN/TPY-2 radar is hosted in Malatya's Kürecik district in southeast Turkey and is operational. An Aegis BMD cruiser armed with SM-3 Block IA missiles was deployed to the Mediterranean, off the coast of Spain, on March 7, 2011, and has a home port in Rota, Spain. The Command Center in Ramstein, Germany, is also operational.

Phase Two (2015 Timeframe). This phase will see an upgrade of the technology on the Aegis ships in the Mediterranean and the addition of a land-based Aegis BMD (Aegis Ashore) system in Romania. These systems will have the SM-3 interceptor Block IB, which will have more advanced sensors, expanding the defended area. SM-3 IB will also offer improved capability against maneuvering ballistic missiles or warheads. With Block IB, the Navy will gain the ability to defend against short- and medium-range missiles and some IRBMs. This technology is currently in the testing phase.

Phase Three (2018 Timeframe). After development and testing are complete, this phase will see the deployment of the more advanced and more maneuverable SM-3 Block IIA variant to counter short-, medium-, and intermediate-range missile threats. Phase three will see an addition of an Aegis Ashore BMD in Poland.

Phase Four (Planned for the 2020 Timeframe, but Later Abandoned). After planning, development, and testing were complete, this phase was to deploy the more advanced SM-3 Block IIB to help better cope with medium- and intermediate-range missiles and potential future ICBM threats to the U.S. homeland. This would deploy at sites in Romania, Poland, and in the Mediterranean.

How the System Works

The system is made up of two components: early warning and surveillance radar systems and interceptor missiles. Positioning the radar in Turkey provides an effective

Chart. European Phased Adaptive Approach to Missile Defense

	Phase I	Phase II	Phase III	Phase IV (canceled March 2013)
Timeframe	2011	2015	2018	2020
Capability	Deploying today's capability	Enhancing medium-range missile defense	Enhancing intermediate-range missile defense	Early intercept of MRBMs, IRBMs and ICBMs
Threat	To address regional ballistic missile threats to Europe and deployed U.S. personnel and their families.	To expand the defended area against short- and medium-range missile threats to southern Europe.	To counter short-, medium-, and intermediate-range missile threats to include all of Europe.	To cope with MRBMs, IRBMs, and potential future ICBM threats to the United States.
Components	AN/TPY-2 (FBM) in Kürecik, Turkey; C2BMC in Ramstein, Germany; Aegis BMD ships with SM-3 IA off the coast of Spain	AN/TPY-2 (FBM) in Kürecik, Turkey; C2BMC in Ramstein, Germany; Aegis BMD ships with SM-3 IB off the coast of Spain; Aegis Ashore with SM-3 IB in Romania	AN/TPY-2 (FBM) in Kürecik, Turkey; C2BMC in Ramstein, Germany; Aegis BMD ships with SM-3 IIA off the coast of Spain; Aegis Ashore with SM-3 IB/IIA in Romania and Poland	AN/TPY-2 (FBM) in Kürecik, Turkey; C2BMC in Ramstein, Germany; Aegis BMD ships with SM-3 IIA off the coast of Spain; Aegis Ashore with SM-3 IIB in Romania and Poland
Technology	Exists	In testing	Under development	In conceptual stage when canceled
Locations	Turkey, Germany, ships off the coast of Spain	Turkey, Germany, ships off the coast of Spain, Romania	Turkey, Germany, ships off the coast of Spain, Romania, Poland	Turkey, Germany, ships off the coast of Spain, Romania, Poland

Key: Aegis Ashore = Land-based component of the Aegis BMD System; AN/TYP-2 (FBM) = Army Navy/Transportable Radar Surveillance, Model 2 (Forward-based Mode); BMD = ballistic missile defense; C2BMC = Command, Control, Battle Management, and Communications; ICBM = intercontinental ballistic missile; IRBM = intermediate-range ballistic missile; MRBM = medium-range ballistic missile

Note: As its national contribution to NATO's BMD, the Netherlands announced in November 2011 that it planned to upgrade four air-defense frigates with extended long-range missile defense early warning radars. Separately, France announced its own plans to develop an early warning system for the detection of ballistic missiles.

early warning advantage since its proximity to Iran—considered to be the main threat in the region—would allow for the destruction of any ballistic missile from Iran the moment it is launched. The radar in Turkey will also identify the trajectory of the missiles and relay the data to Aegis ships. The missiles on the ships will instantly launch against Iranian missiles, neutralizing the threat in its earliest stage. It will take a matter of seconds for the system to work.

At the NATO Summit in Chicago in May 2012, the NATO missile defense system was officially declared to have reached interim operational capability. The command of the radar in Turkey was officially transferred from the United States to NATO. This control arrangement will apply only to the radar system in Turkey; the systems in Poland, Romania, and on U.S. warships will remain under U.S. control.

Threat from Iran

The strategic concept adopted in Lisbon in 2010 states, “The Alliance does not consider any country to be its adversary. However, no one should doubt NATO’s resolve if the security of any of its members are threatened. . . . NATO will . . . develop the capability to defend our populations and territories against ballistic

missile attack as a core element of our collective defense, which contributes to the indivisible security of the Alliance.”

The official line, as stated in NATO speeches and documents, is that the system is designed to protect against missiles in 30 countries. The May 2012 document adopted in Chicago also does not single out any particular country or state: “Ballistic missiles pose an increasing threat to Allied populations, territory and deployed forces. Over 30 countries have, or are acquiring, ballistic missile technology that can eventually be used to carry not just conventional warheads, but also weapons of mass destruction.”⁷

Regardless of what official NATO documents state, however, it appears that the system is mainly aimed against the threat from Iran’s short- and medium-range ballistic missiles and its developing ICBM capabilities. Former U.S. documents state that Iran is perceived as the main threat. For example, the 2009 White House EPAA document included a threat assessment that stated that the EPAA was based on an assessment of the Iranian missile threat. The emphasis on Iran was also possibly a way to deflect Russian concerns. The document stated:

We have repeatedly made clear to Russia that missile defense in Europe poses no threat to

its strategic deterrent. Rather, the purpose is to strengthen defenses against the growing Iranian missile threat. There is no substitute for Iran complying with its international obligations regarding its nuclear program. But ballistic missile defenses will address the threat from Iran’s ballistic missile programs, and diminish the coercive influence that Iran hopes to gain by continuing to develop these destabilizing capabilities.

Iran is a significant concern to NATO members. It has the largest force of ballistic missiles in the Middle East, and the threat from its short- and medium-range ballistic missiles is now assessed as developing more rapidly than previously projected. A nuclear Iran would create a proliferation spiral across the Middle East, effectively ending international nonproliferation efforts. As a sponsor of terrorism, Iran would be able to transfer nuclear materials to its terrorist proxies, threaten Israel, and seek to dominate the energy rich Persian Gulf.⁸

Russia’s Response

The strategic concept laid out at the Lisbon Summit included a segment on revitalizing NATO-Russia relations and cooperation with Russia. The Chicago Declaration reaffirmed NATO’s assurance

to Russia, stating that the project was not oriented against Russia, nor did the project have the capability of undermining Russia's strategic deterrent.⁹ However, no matter how much the Alliance tries to calm Russian concerns, or refrains from naming a specific threat, its Phase Four would have capability against some of Russia's strategic forces. This is factored into Russian concerns and threat calculations, which are based on capability, not intentions.¹⁰ Even though this phase was canceled in March 2013, it is unclear whether Russian concerns have eased completely.

Moscow opposes the planned missile defense system; it is worried that the system could threaten the country's own nuclear missiles and undermine its deterrence capability. Nicolai Sokov, a senior fellow at the Vienna Center for Disarmament and Non-Proliferation, claims the Russians assess that Iran is still far from long-range missile capability. Hence, they think the real target of the missile defense system is Russia, not countries that have or are acquiring ballistic missile technologies as is being publicly declared.¹¹ Furthermore, Russia perceives that merely the presence of the missile defense shield increases the risk of Iran being attacked, weakening one of Russia's allies in the region.

Russian Ministry of Defense officials want legal and written guarantees that U.S. missile defense systems will not be directed against Russian strategic missiles. Moreover, while Russia wants to operate a joint system in which both sides would have control over any decision to launch interceptor missiles, NATO wants to have two separate but coordinated command and control systems that share information.¹² NATO rejected Russia's plan in June 2011 when Secretary General Anders Fogh Rasmussen stated at the Missile Defense Conference in London, "We cannot outsource our collective defense obligations to non-NATO members."¹³

These issues remain unresolved. In early May 2012, officials from NATO, the United States, and Russia met in Moscow at a Missile Defense Conference for 2 days of talks in an effort to find common ground. On May 3, 2012, Russian Defense Minister Anatoly Serdyukov stated that the United States and Russia had not been able to find a mutually acceptable solution and that the situation was practically at a "dead-end."¹⁴ There has not been much progress since.

Russian officials have stated that Russia reserves the right to strike NATO's radars unless it is given the clear written guarantees it wants. After the meeting, General Nikolai Makarov, chief of the Russian defense staff, remarked, "A decision to use destructive force pre-emptively will be taken if the situation worsens." Makarov also stated that if the European shield was built, Russia would respond by putting more powerful warheads on its own ballistic missiles.

Russia's military has also announced plans to develop a new ICBM capable of carrying multiple warheads and other components designed to penetrate U.S. missile defenses. On May 23, 2012, Russia tested a new missile that would have the capability to break the NATO defense system. The timing was significant in that it came days after NATO's Chicago Summit, during which the Alliance formally announced the achievement of the first phase of the system. This missile is believed to be more difficult to detect and easier to maneuver. It is also thought to potentially have individual warheads that can change course to avoid being shot down.¹⁵

View from the Front Line

NATO is Turkey's anchor in the West. It is what institutionalizes Turkey's ties with the West and forms the basis of its Western and European identity. In the last decade, however, Turkey's foreign policy, which included better relations with Iran and Syria and worsening relations with Israel, raised questions about whether it was deliberately distancing itself from the West and was still a trustworthy NATO Ally. Such talks of a shift in orientation from West to East were ignited primarily because Ankara's initial approach to Tehran's nuclear program was significantly different from that of its Western Allies. It focused less on Iran's capabilities and more on its intentions, believing it would never be the target of Iranian nukes. Accordingly, in June 2010, Turkey voted against further sanctions against Iran at the United Nations Security Council, causing a serious crisis in its relations with the United States and Europe and fueling discussions about the West having lost Turkey.¹⁶ The deterioration in Turkey's relations with Israel following the May 2010 flotilla incident added fuel to the fire.

This was the atmosphere in which Turkey attended the November 2010 meeting

in Lisbon. The United States and NATO had decided that Iran was the main threat to world peace and stability. The strategic concept included a BMD project that would employ military tools to deter Iran from becoming a regional nuclear power. When confronted with the BMD project, Ankara had two options. Either it would approve it and reaffirm its position within the Alliance, or reject it and raise serious questions about its position in NATO, altering its relations with both NATO and the United States. Turkey chose to approve the strategic concept. (In an effort to do some damage control in its relations with Iran, it sought to ensure that the documents refrained from identifying Iran as the threat against which the shield would be deployed. It got what it wanted, but this has not convinced Iran.)

In September 2011, Turkey went a step further and agreed to host the radar station as part of the BMD project. In this context, Turkey's decision is not only military or technical but also political. It has clarified the country's long-term strategic orientation and cemented its position in NATO. In fact, in a May 21, 2012, article in the *Chicago Tribune*, Nicholas Burns, former U.S. Ambassador to NATO, claimed that NATO members should offer a greater leadership role to Turkey and consider a Turkish Secretary-General to lead the Alliance within the next decade.¹⁷

What were Turkey's calculations when it not only accepted the project, but also agreed to host the radar? First, it appears it has changed its assessment of Iran's nuclear program. It is adopting a more realistic approach regarding Iran, shifting its focus from the peaceful or hostile intentions of Iran's nuclear program to the importance and necessity of balancing a nuclear Iran's rising regional influence. If Iran becomes a nuclear power, the strategic advantage would change the power balance in the Middle East, a region where Turkey wants increased influence. Second, the uncertainty of events in the Middle East following the Arab Spring demonstrates that Turkey cannot remain friendly with regimes like neighboring Iran and Syria, and this has increased the importance of NATO for Turkey. In early 2013, Turkey's requests for and deployment of Patriot missiles from NATO to protect against potential threats from Syria have also highlighted its dependence on the Alliance.

Iran's First Target Will Be Turkey

Turkey's decision to host the NATO BMD radar system in the southeastern part of its country, 435 miles west of the Iranian border, has caused a serious headache in its relations with Iran.¹⁸ Iranian officials have bashed Turkey's plans to host the radar for the NATO missile shield, which they perceive as a U.S.-led plot to protect Israel in case Israel attacks Iran's nuclear facilities and is faced with a counterattack by Iran.

country in mind and has expressed its opposition to identifying Iran explicitly as a potential attacker. It has also vehemently opposed sharing any intelligence gained from the radar with Israel. Nevertheless, the BMD project will automatically create a security umbrella that will protect Israel against Iran's ballistic missiles. Accordingly, Turkey will be in a position of protecting Israel. Yet Turkish officials have harshly criticized Israel, which has increased the

Turkey cannot appear to be supporting Israel's strategic defense while at the same time taking an adversarial stance against Israel

Therefore, despite the absence of the mention of Iran in official NATO documents, Iran perceives placement of the radar in Turkey to be a hostile act and now considers Turkey a "front line partner" in this "U.S.-led plan." Consequently, it has threatened to make the radar in Turkey its first target in the event of an attack. Iranian Brigadier General Hacizade stated:

*We have prepared ourselves. If there is an attack on Iran, our first target will be the missile shield systems in Turkey, and then we'll turn to other targets. . . . The missile shield to be placed in Turkey is there not because NATO wants it to be, but because the U.S. wants to protect Israel. They are trying to deceive the entire international community, starting with the Turks, into thinking that NATO wants to do this. In today's world, the Zionist regime [Israel] conducts its acts with the U.S., and the U.S. conducts its acts as NATO. However, we believe that the Turks are knowledgeable enough to prevent such a conspiracy. The Muslim Turkish people will destroy this system when it's time.*¹⁹

In mid-December 2011, Hussein Ibrahim, the acting president of the Iranian Parliament's Foreign and National Security Commission, echoed these sentiments, stating that Iran would retaliate by striking the radar site in Turkey should Iran be attacked.²⁰

Protecting Israel against Iran?

To assuage Iran's concerns, Turkey has had to take some balancing measures. It has repeatedly stated that the radar system is not being positioned with any particular

government's popularity domestically and in the Middle East.²¹ The radar's placement in Turkey has now caused a debate in the Middle East regarding claims that Turkey is protecting Israel and has been insincere in its statements against Tel Aviv.²²

In February 2012, during NATO Secretary-General Rasmussen's visit to Ankara in honor of Turkey's 60th anniversary of NATO membership, Turkish officials obtained his assurances that intelligence would not be shared with Israel. Foreign Minister Ahmet Davutoğlu also stated that "NATO's resources and facilities can only be used among NATO members and within the NATO Alliance. . . . We will never allow any NATO facility to be used by a third party. I am making this very clear. If the third party is Israel, then our position is even clearer."²³

Regarding its staunch refusal to share intelligence with Israel, the main question is why Turkey would insist on withholding intelligence that could destroy a nuclear warhead in the air and potentially prevent incredible civilian loss. The government has not given a satisfactory answer to this question. The most likely reason is that it would like to create some kind of consistency and balance within its Middle East policies. It cannot appear to be supporting Israel's strategic defense while at the same time trying to gain influence in the Middle East by taking an adversarial stance against Israel. This stance has included statements about the possibility of military conflict with Israel. With the reinstatement of relations between Israel and Turkey in spring 2013, it remains to be seen whether this stance will soften.

Surrounded by Missiles

In addition to statements from Iran that Turkey will be its first target in the event of an attack, Turkey faces missiles from Russia and Syria. With Russia and NATO in a deadlock as to how to cooperate on the NATO BMD program, Russia has deployed an antimissile radar system to southern Krasnodar in June 2013, which can monitor missile launches from Turkey.²⁴

Ankara is concerned that it will end up in the middle of a disagreement between Washington and Moscow about strategic nuclear weapons. This will again present a challenge to Turkey in balancing its own strategic interests. On the one hand, it will be hosting an important part of the NATO BMD, while, on the other, it places great importance on its fledgling political, economic, and especially energy ties with Russia.

In addition to Russia and Iran, Turkey is concerned about Syrian missiles due to the latest tensions between the countries. Turkey fears that the Syrian regime may arm its long-range Scud missiles with chemical warheads and direct them at Turkey.²⁵

Collective Defense

NATO's vision is to become an alliance that strengthens collective security through measures intended to counter the new threats of the 21st century. Its focus is shifting from protecting military units to protecting populations and territories, suggesting a broader mission. It is also changing its posture from deterrence by mutually assured destruction to deterrence by denial against a broader array of potential threats. This includes a BMD shield that will eventually cover Europe and the United States.

The shield is problematic for Iran and Russia. The very presence of the missile defense shield could increase Iran's perceived risk of being attacked, prompting a preemptive strike. Iran's threat to target Turkey's radar has already soured relations.

Turkey's decision to host the NATO BMD radar is significant. It is an indication of the role Turkey intends to play within the Alliance in the 21st century. It puts an end to debates about a "shifting axis" and its relevance in NATO and clarifies the country's long-term strategic orientation. It is significant that Turkey made this decision knowing it would jeopardize its relations with Syria, Iran, and Russia. It has gone

from seeking to resolve all its problems with its neighbors by means of a “zero problems with neighbors” foreign policy to being faced with missiles from three sides. As the country on the front line, Turkey will likely have to continue to play a balancing act between its geopolitical need to coexist with its neighbors, Iran and Syria and nearby Russia, and its role within NATO. **JFQ**

NOTES

¹ North Atlantic Treaty Organization (NATO), “NATO Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization adopted by Heads of State and Government in Lisbon,” November 19, 2010, available at <www.nato.int/cps/en/natolive/official_texts_68580.htm>. NATO’s Lisbon Summit document identifies the Alliance’s core tasks and principles as collective defense (reaffirming Article 5, to assist each other against attack), crisis management (using political and military capabilities to manage developing crises to prevent them from escalating and to protect Alliance members’ security), and cooperative security (partnership with relevant countries and other international organizations, contributing actively to arms control, nonproliferation, and disarmament).

² Ibid.

³ Sitki Egeli and Serhat Güvenç, “NATO’nun Füze Savunma Sistemi ve Türkiye” [NATO Missile Defense System and Turkey], *Ortadoğu Analiz* 4, no. 40, April 2012, 19–30.

⁴ The White House, “A ‘Phased, Adaptive Approach’ for Missile Defense in Europe,” Fact Sheet on U.S. Missile Defense Policy, September 17, 2009, available at <www.whitehouse.gov/the_press_office/FACT-SHEET-US-Missile-Defense-Policy-A-Phased-Adaptive-Approach-for-Missile-Defense-in-Europe>. The fact sheet states, “The new distributed interceptor and sensor architecture does not require a single, large, fixed European radar that was to be located in the Czech Republic; this approach also uses different interceptor technology than the previous program, removing the need for a single field of 10 ground-based interceptors in Poland. Therefore, the Secretary of Defense recommended that the United States no longer plan to move forward with that architecture.”

⁵ In March 2013, the final (or fourth) planned phase was abandoned.

⁶ Secretary of Defense Chuck Hagel, “Missile Defense Announcement,” The Pentagon, March 15, 2013, available at <www.defense.gov/speeches/speech.aspx?speechid=1759>.

⁷ NATO, statement, Ballistic Missile Defence, May 18, 2012, available at <www.nato.int/cps/en/natolive/topics_49635.htm>.

⁸ “Meeting the Challenge: Stopping the Clock,” Bipartisan Policy Center (BPC) Report on U.S. Policy toward Iranian Nuclear Development (Washington, DC: BPC, February 2012), 56.

⁹ NATO, Deterrence and Defence Posture Review, May 20, 2012, available at <www.nato.int/cps/en/natolive/official_texts_87597.htm>.

¹⁰ Theodore Postol and Yousaf Butt, “Upsetting the Reset: The Technical Basis of Russian Concern over NATO Missile Defense,” Federation of American Scientists (FAS), FAS Special Report No. 1, September 2011, available at <www.fas.org/pubs/_docs/2011%20Missile%20Defense%20Report.pdf>.

¹¹ Aaron Stein, “Turkey-Russia Relations and Missile Defense,” *SES Türkiye* (Istanbul), October 19, 2011, available at <http://turkey.setimes.com/en_GB/articles/ses/articles/features/departments/world/2011/10/19/feature-01>.

¹² Alexander Vershbow, deputy secretary-general of NATO to the Moscow Missile Defense Conference, address, “NATO’s vision for missile defense cooperation with Russia,” May 3, 2012, available at <www.nato.int/cps/en/natolive/opinions_86832.htm>. The idea is to establish two NATO-Russia missile defense centers where NATO and Russian officers would work together. The first, the NATO-Russia Missile Data (MD) Fusion Centre, would pool data from NATO and Russian sensors to form a common diagnosis of possible third-country missile launches. This would be fed into the second, the NATO-Russia MD Planning and Operations Center. There, NATO and Russian officers would develop plans for intercepting missiles that may be launched. The second center would also develop concepts of operations, rules of engagement, and preplanned responses for coordinated missile defense operations that could be implemented in the event of an actual attack. Under this arrangement, NATO and Russia would carry out missile intercepts through their separate command and control systems, but there would be cooperation throughout the intercept process.

¹³ Tom Z. Collina, “Missile Defense Cooperation Stalls,” *Arms Control Today*, July–August 2011, available at <www.armscontrol.org/pintro/4952>.

¹⁴ Richard Weitz, “Moscow Conference Highlights NATO-Russian Gap on Missile Defense,” *World Politics Review*, May 12, 2012, available at <www.worldpoliticsreview.com/articles/11916/moscow-conference-highlights-nato-russian-gap-on-missile-defense>.

¹⁵ Dmitry Zaks, “Russia Tests New Missile After NATO Summit,” *Agence France-Presse*, May 23, 2012, available at <www.defensenews.com/article/20120523/DEFREG01/305230003/Russia-Tests-New-Missile-After-NATO-Summit>.

¹⁶ For examples, see Joschka Fischer, “Who ‘Lost’ Turkey?” *Project Syndicate*, July 1, 2010, available at <[mentary/who—lost—turkey>; Daniel Pipes, “Who Lost Turkey?” *Danielpipes.org*, June 10, 2010, available at <\[www.danielpipes.org/blog/2010/06/who-lost-turkey\]\(http://www.danielpipes.org/blog/2010/06/who-lost-turkey\)>; Nick Danforth, “How the West Lost Turkey,” *Foreign Policy*, November 25, 2009, available at <\[www.foreign-policy.com/articles/2009/11/25/how_the_west_lost_turkey\]\(http://www.foreign-policy.com/articles/2009/11/25/how_the_west_lost_turkey\)>; and Bernhard Zand, “The Anatolian Tiger: How the West Is Losing Turkey,” *Der Spiegel*, June 15, 2010, available at <\[www.spiegel.de/international/world/the-anatolian-tiger-how-the-west-is-losing-turkey-a-700626.html\]\(http://www.spiegel.de/international/world/the-anatolian-tiger-how-the-west-is-losing-turkey-a-700626.html\)>.](http://www.project-syndicate.org/com-</p>
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¹⁷ Nicholas Burns, “Anchoring NATO with Leadership,” *Chicago Tribune*, May 21, 2012, available at <www.chicagotribune.com/news/opinion/ct-oped-0521-leadership-nato-20120521,0,3868940.story>.

¹⁸ “Turkey agrees to host missile early warning radar for NATO,” *The Guardian*, September 2, 2011, available at <www.guardian.co.uk/world/2011/sep/02/turkey-missile-warning-radar-nato>.

¹⁹ Michael Segall, “Iran: The Syrian Highway in the Fight Against Israel Is Still Open,” Jerusalem Center for Public Affairs, January 24, 2011, available at <<http://jcpa.org/article/iran-the-syrian-highway-in-the-fight-against-israel-is-still-open/>>.

²⁰ Sinan Ülgen, “Turkey and the Bomb,” *Carnegie Endowment for International Peace*, Carnegie Europe, February 15, 2012, available at <<http://m.ceip.org/2012/02/15/turkey-and-bomb/9nof&lang=en>>.

²¹ Turkey’s relations with Israel have been at a critical low since the flotilla crisis of May 2010, when the ship *MV Mavi Marmara*, led by an Islamic charity organization and participating in the Gaza Freedom Flotilla, challenged Israel’s blockade of Gaza. An Israeli raid on the *Mavi Marmara* in international waters killed 9 Turkish civilians.

²² Kadri Gürsel, “NATO Nerede, Türkiye NATO’nun Neresinde?” [Where Is NATO, Where Is Turkey Within NATO?], *Milliyet.com*, October 10, 2011, available at <<http://dunya.milliyet.com.tr/nato-nerede-turkiye-nato-nun-neresinde-/dunya/dunyayazardetay/10.10.2011/1448874/default.htm>>.

²³ “İsrail’e İstihbarat Yok” [No Intelligence to Israel], *Stargazete.com* (Istanbul), February 18, 2012.

²⁴ “Russia Switches on New Anti-Missile Radar,” *Global Security Newswire*, June 7, 2013, available at <www.nti.org/gsn/article/russia-switches-new-antimissile-radar/>; “Anti-Missile Radar in S. Russia to Go on Combat Duty by Year-End,” *RIA Novosti*, June 19, 2012, available at <http://en.rian.ru/military_news/20120619/174129770.html>.

²⁵ Semih Idiz, “Patriots in Turkey: Defensive, Offensive or Symblic?” *Almonitor.com*, January 22, 2013, available at <www.al-monitor.com/pulse/originals/2013/01/patriot-missiles-syriaturkey.html>.



Missile Defense Follow-on to European Phased Adaptive Approach

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Ballistic missile defense (BMD) is a key component of the strategic military posture of the United States. The latest version is the European Phased Adaptive Approach, initiated by the Obama administration in 2009. It is a regional defense to protect both our

European allies and deployed U.S. forces from a missile attack by Iran. It does not protect the U.S. homeland, and is less than robust against sophisticated attack configurations. Current homeland-deployed midcourse and terminal defense systems unfortunately do not provide the missing robustness.

BMD has been under uneven development for more than four decades. It has been configured with nuclear, X-ray, particle beam, high-energy laser (HEL), explosive fragmentation, and, finally, kinetic energy kill mechanisms. It has survived mistaken strategic barriers including a treaty that perpetuated mutual assured destruction (MAD) and the notion that BMD unavoidably promoted first strike instability. It has encountered political hurdles that constrained the use of space for weaponry, even defensive weaponry. Although those impediments have not been entirely overcome, there is encouraging progress rooted both in technological advances and in a somewhat relaxed political environment.

The lack of credible ballistic missile defense shaped strategic nuclear concepts throughout much of the latter half of the 20th century. It led to the MAD strategy, variants of which are still in place. MAD derived from very large nuclear stockpiles, typically 10,000 warheads on opposing sides, is driven by game-theoretic issues of first strike stability, and puts a substantial part of the world's population at risk. Fortunately, following several arms limitation agreements, nuclear stockpiles were reduced by almost an order of magnitude, and concurrently missile defense matured considerably. As missile defenses improve and nuclear stockpiles undergo further shrinkage, the MAD strategy will likely approach obsolescence.¹

The widespread perception that missile defense had insurmountable drawbacks significantly influenced the emergence of MAD. It included two unsubstantiated notions: (1) that it is impossible to reliably hit a bullet with a bullet, and (2) by incorporating multiple independent reentry vehicles (MIRVs), decoys, and chaff, the offense will always have an overwhelming edge over the defense. Both have been largely debunked. Miniaturized computer circuits, development of optimized (proportional navigation) guidance algorithms, and redundant sensors mounted on speedy, high-acceleration interceptors have enabled consistent single-shot hit probabilities of 0.8

to 0.95, implying 0.992 to 0.9999 levels for three independent shots. MIRV/decoy/chaff issues have been addressed by focusing on the boost phase of the ballistic missile trajectory, where all offensive elements are bundled together allowing a single hit to destroy the entire package. Admittedly, boost-phase intercept approaches are still works in progress and not adequately funded. There are promising concepts, however, and useful results should follow within a decade or so. Moreover, even if the necessary redundancy is not attained solely in the boost phase, backup by ground-based midcourse and terminal phase interceptors can be provided as necessary.

Perversely, the present political climate is not receptive to space-based weapons. If that changes, high-energy lasers and hit-to-kill interceptor constellations—both space-based—have potential. Brilliant Pebbles (discussed below) with hit-to-kill components has exceptional merit for the boost phase as well as for midcourse. Unfortunately, it was discontinued by the Clinton administration for ideological reasons presumably rooted in reluctance to orbit weapons in space. However, if boost-phase attack is ultimately pursued (as it should be), the utilization of space constellations for missile defense merits additional review.

Solid-state lasers of 1,000 kW in low-Earth orbit also have potential. The key to their success is reducing vulnerability to antisatellite weapons using low-cost decoys.

Additionally, aircraft-mounted high-energy lasers warrant further consideration. Multiple-shot solid-state devices also operating at 1,000 kW with standoff of 100 nautical miles (nm) have been postulated. That level of performance has already been demonstrated with chemical lasers but the launch platforms were bulky, vulnerable to air defenses, and generally unsuitable for military use. The transition to high-energy solid-state media is about 10 years in the future.

In what follows, the history of prior BMD is reviewed and the European Phased Adaptive Approach (EPAA) is then summarized. Our analysis sadly indicates that neither currently deployed stateside defenses nor EPAA offers robust prospects for reliable homeland protection. To set the stage for a dependable homeland defense, the fundamental relationships between high-reliability protection and nuclear stockpile quantities are next expounded analytically. Issues con-

cerning first strike stability in the context of MAD are also explored but subsequently dismissed as irrelevant. Finally, several new approaches are suggested for boost-phase BMD as follow-on to EPAA. The expectation is that reliable missile defense can indeed be realized in the long term and, concurrently, nuclear stockpile quantities can go down further by substantial quantities.

Historical Context

The original BMD program was authorized by President Dwight Eisenhower in 1957 and assigned to both the Advanced Research Projects Agency (ARPA) and the U.S. Army. It was ARPA's largest program. When the "Defense" was added to ARPA to create DARPA in 1972, BMD continued as a major research activity emphasizing high-energy lasers.

Concurrently, the Army also undertook BMD development, initially extrapolating from the Nike antiaircraft series. The first program was Sentinel, a two-tiered nuclear configuration containing interceptors operating both within and above the atmosphere. The endo-atmospheric interceptor was the nuclear-tipped Sprint. Supported by the Perimeter Acquisition Radar, it was able to filter out decoys and chaff. The exo-atmospheric interceptor called Spartan employed an X-ray kill mechanism produced by its nuclear warhead. Guided by the Missile Site Radar, it was capable of destroying several reentry vehicles simultaneously. However, critics maintained that the radars would not function adequately in an environment characterized by prior nuclear detonations and blackout. Ultimately, that flaw terminated the program.

In 1969, the Nixon administration changed both the name and the mission of Sentinel. It became Safeguard and the mission was ballistic missile silo defense rather than city defense. Operational in 1975, Safeguard protected 150 Minuteman intercontinental ballistic missiles (ICBMs) deployed in North Dakota. However, it was deactivated after only a few months. America then became completely dependent on MAD and lacked an operational BMD system for the next three decades.

In the 1980s, the Reagan administration refocused BMD under the Strategic Defense Initiative (SDI). The 1972 Anti-Ballistic Missile Treaty had prohibited extensive BMD deployments but constraints

on research were ambiguous. SDI research, popularly known as "Star Wars," was broad-based and pushed the limits of knowledge. Its principal elements were:

Space-based X-ray Lasers. The initial focus of SDI was a nuclear explosion-initiated X-ray device. In theory, selected spectra would pump linked laser emitters on nearby satellites so that several incoming ballistic missiles could be targeted and destroyed simultaneously. In subsequent testing, however, nuclear-energized lasers proved unsuccessful.

Chemical Lasers. In 1985, a deuterium fluoride laser known as the Mid-Infrared Advanced Chemical Laser (MIRACL) was conceived. It successfully destroyed a Titan missile in a simulated boost-phase intercept and was the basis for several Army and Air Force follow-on programs. In 2009, a descendent of MIRACL shot down a boost-phase missile in actual flight as part of the Airborne Laser test schedule, and in 2010, it destroyed two rockets in quick succession. The Airborne Laser had a power of several megawatts and was capable of 100-nm standoff. However, it required a large, vulnerable launch platform (of the Boeing 747 aircraft class) and was considered unacceptable by the Air Force. The Airborne Laser program was canceled in 2012 after 16 years of development and an expenditure of \$5 billion.

Neutral Particle Beams. An ambitious neutral particle beam weapon for deployment in space was also explored. Neutral particle beams are streams of near light-speed atoms and neutrons emitted by highly energized accelerators and are capable of superheating and catastrophically destroying massive target structures. Particle beam BMD weapons were eventually abandoned because practical space-based versions with the required energy and power were not realized.

When the Soviet Union collapsed and the Cold War ended, the focus of BMD changed. In 1991, SDI was recast as Global Protection Against Limited Strikes (GPALS). GPALS had three components collectively intended to provide robust protection against accidental or unauthorized attacks by Russia or China and limited attacks by rogue nations. They included a space-based defense against boost-phase missiles, a ground-based midcourse phase for homeland defense, and a ground-based terminal defense against theater threats. Its principal programs were:



Airborne Laser Test Bed final flight as it transitions to long-term storage in Arizona

Missile Defense Agency

Brilliant Pebbles. Brilliant Pebbles was a stand-alone space-based constellation of small interceptors primarily focused on boost-phase targets. It was time-durable and survivable. The 6-kilometers per second (km/sec) kinetic energy kill vehicles each weighed about 3 kilograms (kg). Brilliant Pebbles employed a wide field of view infrared camera to detect missile launch, visible and ultraviolet cameras to point toward the target's bright compact plume, and a far-infrared imager in conjunction with a co-focal light detection and ranging (Lidar) sensor to resolve the missile body from its plume. Costs were estimated at \$1.1 million per interceptor or roughly \$1.1 billion for a constellation of 1,000.² Brilliant Pebbles³ achieved or defined a clear path to most of the GPALS objectives for boost-phase BMD. However, it was canceled both on budgetary grounds and on a reluctance even to put defensive weapons into space.

Ground-based Midcourse Defense.

GMD is a deployed BMD system to protect the U.S. homeland. Interceptors were emplaced in Alaska and California, totaling 30 missiles by the end of 2010, with the objective of adding 14 more by 2017. Further plans to put missiles in Poland and radars in the Czech Republic were subsequently canceled by the Obama administration. GMD is a three-stage interceptor with a solid-fuel booster and an exo-atmospheric kinetic energy kill vehicle (EKV). The 64-kg

EKV has a speed of 10 km/sec and an infrared seeker to discriminate reentry vehicles from decoys and chaff. The EKV has its own guidance divert propulsion, discrimination algorithms, and computers.

Terminal High-Altitude Area Defense System. THAAD is a U.S. Army system to destroy ballistic missiles in their final phase. THAAD employs an enhanced kinetic energy kill mechanism. Two batteries (48 missiles) were activated in Texas in 2008 and two additional batteries are planned for 2013. Some of these missiles will be deployed in Guam in response to North Korean threats. The launchers, together with eight missiles, are truck-mounted. Each missile weighs 900 kg, the range is greater than 200 km, and the speed is 2.8 km/sec. Guided by the Army Navy/Transportable Radar Surveillance (AN/TPY-2) X-band radar, THAAD is similar to the Patriot PAC-3 and is designed to hit with a small explosive warhead that enhances the kill. The U.S. Navy has a complementary sea-based system—the Aegis Ballistic Missile Defense System—that uses the Standard Missile 3 (SM-3).

New BMD Approaches

In September 2009, the Obama administration decided to cancel GMD deployments planned for Poland and the Czech Republic and instead undertook the European Phased Adaptive Approach. According to the National Research Council,⁴ EPAA is

specifically intended to protect European allies and deployed U.S. forces against an Iranian midcourse missile attack. It is not a defense against an attack by Russia or China.

EPAA was planned in four phases to begin in 2011 and end after 2020. The deployment includes SM-3s with Blocks IA/IB/IIA/IIB, in which velocities increase progressively from 3 to 5.5 km/sec and in which seeker optics are upgraded from one-color to two-color. Initially, the system uses sea-based AN/SPY-1 and AN/TPY-2 radars, and the latter radar was deployed in 2011 in Turkey. A total of 32 Aegis ships, each capable of tracking one hundred targets simultaneously, will be delivered along with 409 SM-3s. In 2015, some of those SM-3 interceptors will also be deployed on land in Romania, and possibly by 2018 in Poland. The United States will additionally develop the Airborne Infrared Sensor platforms capable of tracking hundreds of targets simultaneously.

The SM-3 Block IIB was scheduled to be deployed in Phase 4. The intent was to provide “limited” capability to counter ballistic missiles in the boost phase. However, a 2011 Defense Science Board study asserted that goal was unrealistic and Phase 4 was subsequently canceled in 2013.

A number of deployments in Phase 1 are currently in place to defend against first-generation Iranian missile launches (that is, those that are not augmented with extensive MIRVs

and decoys). Existing EPAA deployments are capable of effective midcourse engagements only until such time as Iran inevitably fields more capable countermeasures.

Several X-band radars oriented toward Iran are currently stationed in Turkey, the Negev Desert in Israel, and the Island of Qatar. Patriot PAC-3 Missiles are collocated with the radars. Standard Missiles on Aegis Missile Defense Ships are also deployed in both the Mediterranean Sea and Persian Gulf.⁵ The deployment is such that ballistic missile launches directed toward the Middle East or Europe can be detected and responded to with redundancy. The short- and medium-range missiles in Iran's inventory have large radar cross-sections, and Standard Missiles deployed on Aegis ships and land-based Patriot PAC-3 Missiles have a promising record for engaging such targets. They do not have enough range and speed to engage them in the boost phase, however.

Beyond EPAA

A solid-state HEL mounted on an aircraft is a long-term alternative to EPAA and would be capable of multiple lethal shots from standoff distances of 100 nm. The required laser power is 1,000 kW. The currently achieved maximum power level is 105 kW, reached in 2009, with the Northrop Grumman Joint High Power Solid-State Laser (JHPSSL). JHPSSL leveraged seven 15-kW laser units synchronized to produce the total output. It is conceptually scalable to achieve even higher power.

A parallel effort is the High Energy Liquid Laser Area Defense System (HELLADS) being developed by General Atomics with sponsorship from DARPA. The goal is to synchronize three 50-kW lasers to produce a total output of 150 kW.

Note that neither JHPSSL nor HELLADS is intended to engage ballistic missile targets. They nevertheless are judged to be appropriate technology for scaling up to a usable antiballistic missile weapon.

High-energy lasers can also be deployed from space. Solid-state devices of 1,000 kW are again envisioned. Target selection and acquisition would have to be provided by a space-based array such as the Airborne Infrared Sensor configuration. Assuming only one laser will be involved, the engagement by necessity would be shoot-look-shoot. Space-based HELs have been investigated by DARPA for many

years but have not been realized as weapons because of their vulnerability to antisatellite weapons. Note, however, that survivability can be increased very substantially by embedding the HEL platform in a constellation of decoys. Improvements in invulnerability by a factor of 10–100 can be achieved at modest cost.

An HEL with capability against boost-phase ballistic missiles includes 10 100-kW lasers synchronized to produce a 1,000-kW output. The system includes an adaptive optics module to compensate for a turbulent atmosphere.

A key technology for successful HELs involves dissipating large quantities of waste heat. Typically, a HEL has about a 10 percent thermal efficiency, so a 1,000-kW laser produces 900 kW of waste power, the heat from which must be dealt with. ARPA is supporting efforts to increase the HEL efficiency to 30 percent.

As mentioned previously, one of the more promising approaches for providing multiple shots in the boost phase is Brilliant Pebbles. Brilliant Pebbles expends small, relatively inexpensive projectiles at moving targets. This encourages multiple defensive attempts either simultaneously or in quick shoot-look-shoot succession. Since the Brilliant Pebbles projectiles are stand-alone with independent target acquisition and tracking, the multiple engagements should be statistically independent.

An additional boost-phase BMD initiative could be based on stealthy armed aerial drones. Target selection and acquisition would be self-contained using passive infrared sensors. If the drones operated within roughly 50 nm of the launch site, they could attack large, initially slow-moving ballistic missiles with conventional air-to-air missiles using explosive warheads. Drones of the MQ-9 Reaper class are currently being considered for boost-phase target acquisition but not for attack. Reapers can stand off hundreds of nautical miles but they are not stealthy.

Focus on the Boost Phase

Reliable defenses for protection of the homeland are in disarray programmatically. Current and planned deployments do not deal with a sophisticated attack and focus only on the midcourse and terminal phases. Boost-phase defenses were developed to a significant level in the SDI and GPALS activ-

ities. Although now dormant, they could be restored relatively quickly since the principal political constraint—the Anti-Ballistic Missile Treaty—has been removed.

The focus of an efficient defense should be in the boost phase because the MIRVs, decoys, and chaff are still bundled together, and a single energetic hit will destroy them all. If the attack is delayed until the midcourse or terminal phases, it will be necessary to engage numerous entities for reliable operations. Currently deployed defenses deal only with midcourse and terminal threats.

Analytical Modeling

Arms limitation agreements between the United States and Soviet Union/Russian Federation have reduced respective strategic nuclear stockpiles substantially: from 10,000 to 6,000, from 6,000 to 3,500, and then to 2,200. The New Strategic Arms Reduction Treaty negotiations, which reduce levels to 1,500–1,675, have recently been completed and ratified by the U.S. Senate. These smaller stockpiles help to enable effective missile defense. This can be shown analytically by calculating surviving strategic reentry vehicles as a function of the number of attackers and the effectiveness of the defense.

Attacks varying from 10,000 to 10 are of interest. Missile defense consists of three independent attempts against each threat since individual missile defense effectiveness is not perfect and varies from 80–95 percent. The significant finding is that surviving warheads are substantially less than 1 if the defense effectiveness is 95 percent for attacks of 1,000, and also for attacks of 100 at effectiveness levels of 80–90 percent.⁶ It is not unreasonable to anticipate opposing stockpiles of 1,000 and defense effectiveness at 95 percent within a decade or so.

Strategic and First Strike Stability

The implications of both strategic stability⁷ and first strike stability⁸ have been studied intensively. Strategic stability arguments are highly subjective and have been used by Russian analysts to justify opposition to a wide set of U.S. military programs including space weapons, precision-guided weapons, drone reconnaissance, drone weapons, and ballistic missile defense. Since the end of the Cold War and the downsizing of the Soviet Union, the United States has outstripped the Russians in all these categories and they, not surprisingly, have



Command, Control, Battle Management, and Communications is combatant command's interface to fully integrated Ballistic Missile Defense System

depicted each as “destabilizing.” Obviously, the United States does not agree to those characterizations.

First strike stability is substantially quantitative however, and we focus on it instead of strategic stability. During the height of the Cold War, BMD was considered by both the Soviet Union and the United States to be highly destabilizing; that is, the Russians maintained that construction of missile defenses would negate their nuclear deterrent encouraging a first strike even before the program was complete. The United States agreed. To mitigate that danger, the 1972 Anti-Ballistic Missile Treaty was negotiated and ratified by both sides. However, nuclear arms limitation in the last two decades has largely eliminated those concerns, at least on the part of the United States, and the 1972 treaty has since been nullified.

In the past several decades, nuclear stockpiles on both sides have decreased substantially. *Analysts agree that as opposing stockpiles approach 1,000, first strike stability becomes insensitive to missile defenses.* This follows because at reduced stockpile levels a large fraction of the U.S. capability is on submarines and bombers, and both are substantially invulnerable to a first strike. As the U.S. stockpile is drawn down to the vicinity of 1,000, mostly submarine and bomber forces will be left because they are the least vulnerable and under those cir-

cumstances BMD cannot have a meaningful effect on first strike stability.

Summary and Recommendations

Ballistic missile defense has been under development, albeit in fits and starts, for more than four decades. It has continued through numerous design iterations that included nuclear, X-ray, particle beam, high-energy laser, explosive fragmentation, and, finally, kinetic energy kill mechanisms. It has survived mistaken strategic barriers including a treaty that perpetuated MAD, and the notion that BMD promoted first strike instability. It has also faced political hurdles that constrained the use of space for weaponry, even defensive weaponry. Although these impediments have by no means been overcome completely, there is reasonable hope the obstacles will be removed in the long term.

The current emphasis is on the European Phased Adaptive Approach. EPAA is regional and is not oriented for boost-phase operations. EPAA does not include space weaponry and does not encompass high-energy lasers. EPAA is capable only of coping with primitive ballistic missiles in the midcourse phase; that is, it cannot deal with MIRVs or decoys. Note that both the existing GMD and THAAD deployments in the homeland have been thus far left in place and added to but they too have only primitive capability against MIRVs and decoys.

If America is to have a robust BMD capability against sophisticated ballistic missiles, it must resort to a boost-phase defense. Brilliant Pebbles, standoff and space deployed high-energy lasers, and stealthy drones armed with air-to-air missiles are all promising approaches for achieving such a boost-phase capability. These concepts presently violate a misplaced reluctance to put weapons in space, and/or are budget busters. However, as stockpiles of the nuclear powers decrease to levels of 1,000, current political and fiscal constraints could and should be relaxed so that robust security can be achieved. **JFQ**

NOTES

¹ It is of course conceivable that the United States and China may eventually confront each other with a new version of mutual assured destruction even at reduced stockpile levels.

² Gregory H. Canavan, *Missile Defense for the 21st Century* (Washington, DC: The Heritage Foundation, 2003); the assumed cost for low earth orbit was \$20,000 per kilogram in 2003 dollars.

³ Although final parameters were not established, a typical Brilliant Pebbles constellation orbits at an altitude of 1,000 kilometers with a speed of 7.5 kilometers per second. Assuming 1,000 interceptors packaged in 333 mini-satellite containers spaced 139 kilometers apart, on the average, 3 interceptors can be delivered in 18.7 seconds or less to any point in the orbit.

⁴ National Research Council (NRC), *Making Sense of Ballistic Missile Defense: An Assessment of Concepts and Systems for U.S. Boost-Phase Missile Defense in Comparison to Other Alternatives* (Washington, DC: NRC, September 11, 2012).

⁵ Adam Entous and Julian E. Barnes, “Pentagon Bulks Up Defenses in the Gulf,” *The Wall Street Journal*, July 17, 2012.

⁶ The calculation is at a basic level: $S = N \{1 - (1 - P_k)^3\}$ where S is the number of surviving warheads and N is the size of the attack. P_k is the effectiveness of individual defense layers.

⁷ Derek F. Schin, “The Impact on Strategic Stability of Ballistic Missile Defense in Eastern Europe” (Master’s thesis, U.S. Army Command and General Staff College, 2009); Alexei Arbatov et al., *Strategic Stability After the Cold War* (Moscow: Institute of World Economy and International Relations, Russian Academy of Sciences, 2010).

⁸ Glenn A. Kent and David E. Thaler, *First Strike Stability: A Methodology for Evaluating Strategic Forces*, Reports, R-3765 (Santa Monica, CA: RAND, August 1989).



German soldiers move through trenches

Inverting Clausewitz

Lessons in Strategic Leadership from the 1918 Ludendorff Offensives

By BRAD CLARK

As the United States approaches the end of its 12th year of conflict in Afghanistan, much of the history of the war has already been written. Although magisterial works setting the U.S. intervention in the context of the broad sweep of Central Asian history, or into the somewhat narrower sweep of America's wars, may have to wait until the war has a perceptible end, studies of specific characteristics of the conflict, of the key events, and of the politics surrounding the war have been in publication almost since the first U.S. air strike in 2001. In particular, recent literature has focused on the development and implementation of the Afghan counterinsurgency "surge" strategy by the Obama administration over the course of 2009.

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The Afghan surge is nearly as fertile a topic as the Afghan War itself. Popular writing has focused on such issues as the bureaucratic process that led to the surge, the personalities involved, or on alleged mistakes made in implementing the strategy.¹ Specialist literature has honed in on U.S. counterinsurgency strategy itself, either as applied to Afghanistan or as an operational concept generally.² But discussions of the administration's internal debate over the surge tend to overlook the importance of the very fact of this debate, a controversy over ends and means, or over the acceptability and feasibility of a proposed strategy, as an exemplar of strategic leadership. Whether President Barack Obama and his team arrived at the correct strategy obscures the more important point that they were, critically, holding the correct debate. History is replete with cautionary examples of what happens when leaders fail to conduct this fundamental strategic calculus. Means are elevated over

ends and strategies are divorced from realistic objectives, and the result is disastrous, as Imperial Germany learned in 1918.

Ludendorff's Flawed Strategic Vision

On March 21, 1918, the German army attacked the British army along a front 40 miles wide with a force of 37 divisions in what Winston Churchill termed "the greatest onslaught of the history of the world."³ The attack was the first of six major offensives against both the British and French that lasted nearly four months. Despite "impressive territorial gains," nothing of strategic significance was accomplished and the German army took over a million casualties,⁴ which it could not replace. Conceived as a war-winning effort to achieve a decisive victory, these offensives hastened Germany's defeat. At the end of this offensive, the "German Army no longer crouched but sprawled."⁵

The architect of these offensives was General Erich Ludendorff. As chief of staff



Soldiers go over wall in assault against German infantry

to Field Marshal Paul von Hindenburg, Ludendorff was the creative brains of the duo and developed the German strategy for von Hindenburg's approval.⁶ From their brilliant victory against the Russians at Tannenberg in 1914 through the introduction of their new defensive tactics on the Western Front in 1917, they had been everywhere successful. That changed in 1918. Ludendorff ultimately failed as a strategic leader because of a fundamentally flawed vision of strategy in which means became ends, and Clausewitz's great dictum—that war is a continuation of politics by other means—was turned on its head.⁷

Checked at the Marne in 1914, the German army remained on the strategic defensive on the Western Front while British and French armies periodically attempted to push the Germans out of France.⁸ Both sides were locked in a war of attrition along a “continuous line of trenches, 475 miles long,”⁹ from the Flemish coast to the Swiss border. After over 3 years of sanguinary stalemate, 1918 dawned with new risks and opportunities for the German Supreme Command owing to three significant events in the previous year: the entry of the United States into the war as a result of the 1917 German unrestricted submarine campaign, increasing hardship in Germany as a result of the British naval blockade, and Russia's exit from the war as a result of the Bolshevik coup d'état.¹⁰

The first two of these events increased pressure on Germany to bring the conflict

to a rapid end. The blockade was strangling Germany and undermining morale on the home front, as reflected in a violently suppressed labor strike in January 1918.¹¹ The United States provided the Allies with an untapped source of manpower that Germany could not hope to match. Against these challenges, the collapse of Russia freed resources from the Eastern Front, permitting Germany to bring new strength—over 50 first class divisions—to bear in the West. Berlin could eclipse Allied strength, if only slightly, and only until American forces began arriving.¹²

There was one other development that more than anything else drove Ludendorff's strategic calculus in 1918: the development of new infantry “storm” tactics. Tested in the East at Riga in 1917, these tactics relied on speedy infiltration of enemy positions by bypassing centers of resistance to achieve deep penetrations for follow-on exploitation while leaving strong points for mop-up by subsequent waves of infantry.¹³ These tactics were Ludendorff's solution to cracking the Allied front, reintroducing a war of movement and compelling a decisive battle on the Western Front.

Once Ludendorff was committed to an attack, the next decision was where to attack. He consulted the chiefs of staff of the army corps involved. One advocated attacking the French at Verdun while another urged attacking the British in Flanders.¹⁴ Ludendorff himself favored an attack on the British near St. Quentin, where the British and French armies joined.¹⁵ Ultimately the

first attack fell there, in accordance with Ludendorff's conviction that if the British Expeditionary Force (BEF) was defeated, the French could not continue.¹⁶ Putting aside the validity of this assumption, “The fact that he remained undecided about the location of an attack that he wanted to take place within ten or twelve weeks is suggestive of a lack of strategic clarity.”¹⁷ This lack of clarity would undermine the German effort in the months ahead.

The Spring Offensive

The first attack, codenamed *Michael*, began on March 21, and was followed in succession by *Georgette*, *Mars*, *Blücher-York*, *Gneisenau*, and finally the *Friedensturm*, or Peace Offensive, on the Marne July 15–17. *Michael* and *Blücher*, and to a lesser extent *Georgette*, each achieved deep penetration of the British line but at tremendous cost—what Churchill termed “the price of the offensive”¹⁸—and to no strategic effect.¹⁹ Each attack followed a recurring pattern as casualties, exhaustion, stiffening resistance, and what Clausewitz termed “friction”²⁰ robbed it of its impetus. Each penetration weakened subsequent attacks by drawing in German reserves to defend an extended front in a newly created salient, in hastily constructed positions generally facing Allied fire from three sides.²¹

Another pattern that repeated itself in the Ludendorff offensives was emblematic of Ludendorff's weakness as a strategist. He allowed tactical developments to undermine his operational design. In the *Michael* offensive, the main effort was to be in the north, but that was where the resistance was greatest. So Ludendorff reinforced the supporting effort in the south, where more progress was made. This “tactical bias” resulted in changing the direction of the attack to exploit tactical success²² and more critically to changing the objective. The initial objective was to turn the British flank and drive northwest to the sea, but this shifted to an effort to split the British and French armies. Instead of one massive thrust, there would be three lesser thrusts (and paid for with reserves intended for what became the *Georgette* attack).²³ Ludendorff was “reacting to events, following the line of least resistance, rather than dominating and determining the outcome.”²⁴ The tactical directive became the strategic goal, and Ludendorff's lack of clarity led to a general

pressing forward by successful elements.²⁵ This begged the question, *pressing forward to what?* “The absence of an answer exposed the emptiness of the *Michael* operation after the first day’s failure on the right.”²⁶

Ludendorff fell into the same trap in the *Blücher* attack, originally intended as a diversion against the French to draw in Allied reserves preparatory to an attack against the British in Flanders.²⁷ As with *Michael*, spectacular early success (Paris beckoned) caused a shift in Ludendorff’s objective and a diversionary attack became the German main effort until it, too, stalled.²⁸ “Outwardly all seemed to be going well. Actually all had miscarried.”²⁹ Two more offenses, *Gneisenau* and *Friedensturm*, were attempted, but neither offered any real hope of victory. One German staff officer remarked after *Blücher*, “The Supreme Command renounced further plans for decisive battle, and made other diversive [*sic*] offenses in the hope of something turning up.”³⁰ Nothing did, and the butcher’s bill was more than Germany could pay. In 6 months, the German army was 900,000 men smaller, even as American forces began to swell the Allied ranks. The balance of force, and the initiative, shifted irrevocably to the Allies.

Much could be written about Ludendorff’s persistently erroneous assumptions in 1918: that Germany had the means—in the trenches of 1918—to achieve the decisive battle that eluded them in the open terrain of 1914; that the BEF, and not the French army, was the Allied center of gravity; that the defeat of the BEF in France would knock England out of the war; and so on. But analyzing these errors is beside the point; whatever his failures to test or retest the assumptions that informed his operational concepts, Ludendorff did not adhere to those concepts long enough for his assumptions to matter.

Failure to Define a Purpose

Ludendorff had deduced that “tactics had to be considered before purely strategic [*sic*] objects which it is futile to pursue unless tactical success is possible.”³¹ This is reasonable. Feasibility of any course of action is a fundamental consideration. But Ludendorff went much further—or rather, did not go anywhere at all—by substituting tactical considerations (means) for strategic objectives (ends). His “innova-

tive techniques were largely invalidated by the inability to define a purpose for the campaign.”³² If there is any validity to Clausewitz’s theory of strategy and strategic leadership,³³ then Ludendorff’s approach could not be further from the ideal.

Starting from political considerations, the strategist must “define an aim for the operational side of the war that will be in accordance with its purpose.”³⁴ Then, in exercising leadership, the strategist with “great strength of character” and “firmness of mind” follows through steadily and is not “thrown off course by thousands of diversions.”³⁵ Put another way, strategy assigns an aim to an operation, which is nothing more than a means to obtain that aim.³⁶ With the 1918 offensives, the objective was not so much lost as never given any primacy. Ludendorff’s own summary of his concept of operations reads as a rejection of Clausewitz: “We will punch a hole. . . . For the rest, we shall see.”³⁷ This “was not strategy. It was more like an act of faith . . . a blind hope that something, somehow, would turn up.”³⁸

Churchill wrote, “That the decision was disastrous has been proved by the event. But it may also be contended that it was wrong.”³⁹ The offensives failed and the question becomes whether there was an alternative given the strategic situation in early 1918. Certainly there were voices within Germany in favor of peace. Chancellor Georg von Hertling wanted to be the “reconciliation chancellor,”⁴⁰ and elements in the Reichstag advocated outreach by making a commitment to the territorial integrity of Belgium.⁴¹ The Russian collapse and German territorial gains in the East offered potential bargaining chips.⁴² It was not to be. Ludendorff was bent on keeping German conquests in the East and the West, most problematically (for the peacemakers) parts of France and Belgium.⁴³

This was incredibly naïve considering Belgium was the reason England entered the war in the first place. This thinking reveals a still greater failing as a strategist: Ludendorff’s inability to understand the political object of the conflict and to subordinate his military strategy to it. Whatever Germany had gone to war for in 1914, it was not the conquest of Belgium or the annexation of the French coal fields. By 1918, the war had become about national survival, a fact Ludendorff appears to have recognized⁴⁴ but to which he appears to have applied no considered analysis.

Similarly, once begun, the offensives did not have to be all or nothing. General Max Hoffmann, formerly Ludendorff’s top staff officer in the East, noted that the “first attempt [*Michael*], undertaken with all the means at our disposal, had failed, so it was certain . . . that further attacks undertaken with diminishing resources could not hope for success. On the day Ludendorff broke off the first offensive before Amiens, it would have been his duty to draw the attention of the Government to the desirability of opening peace negotiations.”⁴⁵ But this, again, required a focus on the political objective of the conflict, which was something Ludendorff could not see in realistic terms.

At that point Germany still had some means and some hope of resistance. The blockade held, but perhaps the Eastern conquests could be organized to Germany’s economic advantage. Perhaps the lift in morale that American forces provided⁴⁶ could be blunted as the Americans bloodied themselves against a German line defended in depth by elite divisions. Perhaps, too, the enthusiasm of the Alliance to continue the war could be diminished by a political program that stated Germany had no territorial aims in the West and would “prejudice in no way the freedom and honor of other peoples.”⁴⁷ Ludendorff was blind to such alternative courses of action, which were better suited to political realities and the actual strategic context, because of his hyper-focus on the means at his disposal: innovative offensive infantry tactics and a mass of fresh divisions. They were on hand. They must be used.

Confusing Means with Ends

There is more to war than warfare and there is more to strategy than military strategy.⁴⁸ A strategist must understand context, the nature of the threat, and its relationship to the national interest.⁴⁹ Given the context of 1918, the question facing Ludendorff was *how to ensure national survival*. A “marginal-utility calculus of violence,” what Michael Geyer terms an “idealistic strategy,” would have “counseled the limitation and scaling down of goals in an increasingly desperate military situation.”⁵⁰ Ludendorff was constitutionally unable to do that. “In Ludendorff was found a hardy gambler incapable of withdrawing from the game while he still had stakes to play.”⁵¹ In his mind, “supreme hazards exercised an evident fascination.”⁵²

On a fundamental level, to Ludendorff, the war itself became the end, or what Clausewitz called a “complete, untrammelled, absolute manifestation of violence” that usurped policy.⁵³ There were clear alternatives to a fight to the death, but Ludendorff could not conceive of them.

Ludendorff provides a cautionary tale for today’s strategists in two respects. Strategists must avoid confusing means with ends. This temptation remains relevant in an era of nation-building as a response to a terrorist attack, in an era of new (or renewed) concepts such as Air-Sea Battle or counterinsurgency operations. “Securing the populace,” however laudable as a humanitarian ideal, is at core a *means* to starve an insurgent group of indigenous support, not an *end* in itself. Other means to the same end may be as effective, or more effective, depending on the context. In this respect, the debate over the Afghan surge is a positive counterexample. It arguably forced a reconsideration of ends from successful application of doctrinal counterinsurgency tactics itself⁵⁴ to the underlying national security objectives these tactics were a means to address.

Perhaps more important, an examination of the Ludendorff offensives offers insights into the proper relationship between national leaders and the technical experts who advise them. “Ludendorff is an outstanding lesson in the dangers of the expert who has so concentrated on his own department that he is unable to see the part in relation to the whole.”⁵⁵ Because he could see only the military instrument, and saw politics as something that served war, Ludendorff’s war plans were not strategy but rather the inversion of strategy. They were not crafted in service of a political goal other than victory at any price, without any real thought as to what interest that victory might serve. “The first casualty of this insistence was strategy as the principled analysis of war.”⁵⁶ In strategy, means should be subordinated to ends, and war to policy. Ludendorff managed to “turn this calculus on its head.”⁵⁷

When the conduct of war is turned over to technologists or engineers, to “operationists”⁵⁸ like Ludendorff, divorced from the larger political context, from the purpose for which the instrument of war is used, there is danger. There is danger that war aims—cast adrift from political objectives—will become “radical and encompassing” with goals “subordinated to the mobilization of means,

independent of the actual military use-value of each new increment of force.”⁵⁹ In such an environment, lives are thrown away, nations are exhausted, and war progresses to the natural, maximum, unrestrained level postulated by Clausewitz. **JFQ**

NOTES

¹ See, for example, Rajiv Chandrasekaran, *Little America: The War with the War for Afghanistan* (New York: Knopf, 2012); Bob Woodward, *Obama’s Wars* (New York: Simon & Schuster, 2010).

² See, for example, Colin S. Gray, “Concept Failure? COIN, Counterinsurgency, and Strategic Theory,” *PRISM* 3, no. 3 (March 2012), 17–32; Charles A. Kupchan et al, “Pull the Plug on the Afghan Surge,” *Financial Times*, November 3, 2009, available at <www.ft.com/intl/cms/s/0/1e98cbac-c8c6-11de-8f9d-00144feabdc0.html#axzz2PEf4eSNH>; Gian P. Gentile, “COIN Is Dead: U.S. Army Must Put Strategy Over Tactics,” *World Politics Review*, November 22, 2011, available at <www.worldpoliticsreview.com/articles/10731/coin-is-dead-u-s-army-must-put-strategy-over-tactics>.

³ Winston S. Churchill, *The World Crisis, 1911–1918* (New York: Simon & Schuster, 1931), 769.

⁴ Williamson Murray, “Ludendorff: Tactical Genius, Strategic Fool,” *Military History* 25, no. 4, (September–October 2008), 48.

⁵ Churchill, 771.

⁶ Erich Ludendorff, *My War Memories, Vol. I* (London: Hutchinson, 1919), 12.

⁷ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 69.

⁸ The limited German offensive at Verdun in 1916 could be considered an exception, but it was conceived as part of a generally defensive strategy to provoke a French response.

⁹ John Keegan, *The First World War* (New York: Random House, 1998), 136.

¹⁰ Churchill, 763.

¹¹ G.J. Meyer, *A World Undone: The Story of the Great War, 1914–1918* (New York: Bantam Dell, 2007), 520–521.

¹² Churchill, 763.

¹³ Keegan, 375–376.

¹⁴ Meyer, 528.

¹⁵ Ibid., 520.

¹⁶ Ibid., 528.

¹⁷ Ibid., 520.

¹⁸ Churchill, 771.

¹⁹ Barrie Pitt, *1918: The Last Act* (New York: Norton, 1962), 127.

²⁰ Ibid., 150. German soldiers, starved of all but necessities by the blockade, found British stocks and untouched French villages. The

resulting looting and drunkenness did much to hold up the advance. Here is friction.

²¹ Ibid.

²² Sir Basil Henry Liddell Hart, *Strategy* (New York: Praeger, 1954), 207.

²³ Keegan, 403–404.

²⁴ Ibid., 404.

²⁵ Pitt, 105.

²⁶ Meyer, 549.

²⁷ Keegan, 407.

²⁸ Ibid.

²⁹ Churchill, 792.

³⁰ Pitt, 178.

³¹ Liddell Hart, 205.

³² Michael Geyer, “German Strategy, 1914–1918,” in *Makers of Modern Strategy*, ed. Peter Paret, 552 (Princeton: Princeton University Press, 1986).

³³ There is!

³⁴ Clausewitz, 177.

³⁵ Ibid., 178.

³⁶ Ibid., 143.

³⁷ Keegan, 394.

³⁸ Meyer, 549.

³⁹ Churchill, 577. Writing on the German decision to attack Verdun, Churchill’s statement applies with equal force to the Ludendorff offensives.

⁴⁰ Meyer, 519.

⁴¹ Ibid., 521.

⁴² Churchill, 763.

⁴³ Ibid., 764; Pitt, 242.

⁴⁴ Ludendorff, 368, commenting on “the enemy’s lust for our destruction.”

⁴⁵ Pitt, 243.

⁴⁶ Churchill, 691. The “moral consequence of the United States joining the Allies was the deciding cause of the conflict.”

⁴⁷ Gordon A. Craig, “Delbruck: The Military Historian,” in *Makers of Modern Strategy*, ed. Peter Paret, 347 (Princeton: Princeton University Press, 1986). Craig is quoting the German military historian Hans Delbruck’s contemporaneous arguments.

⁴⁸ Gray, 22.

⁴⁹ *Strategic Leaders as Strategists*, Course 6200 materials, National War College.

⁵⁰ Geyer, 550.

⁵¹ Churchill, 801. When those stakes were gone, Ludendorff was of no use. His collapse before his Army and his nervous breakdown in October 1918 precipitated the German collapse. Pitt, 252. A fish rots from the head.

⁵² Churchill, 689.

⁵³ Clausewitz, 87.

⁵⁴ Gentile.

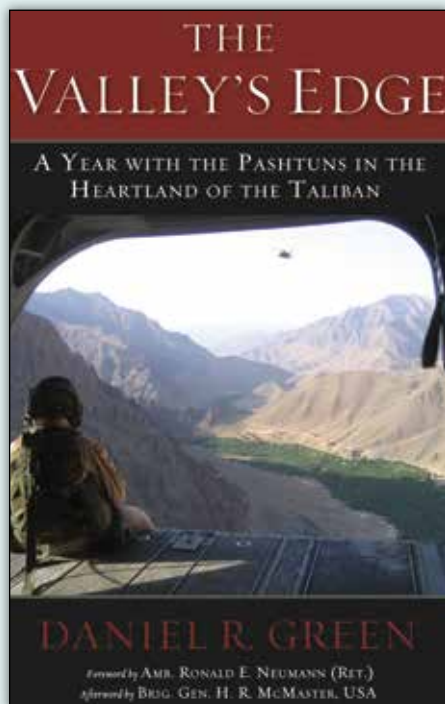
⁵⁵ Basil Henry Liddell Hart, *Through the Fog of War* (New York: Stratford Press, 1938), 137.

⁵⁶ Geyer, 546.

⁵⁷ Ibid.

⁵⁸ Or, perhaps, “grand tacticians.”

⁵⁹ Geyer, 550.



The Valley's Edge: A Year with the Pashtuns in the Heartland of the Taliban

By Daniel R. Green

Potomac Books, 2012

288 pp. \$29.95

ISBN: 978-1-59797-694-7

Reviewed by

JOHN O'RYAN BULLOCK

As the war in Afghanistan nears completion of its 11th year, it is not uncommon to hear members of the Armed Forces describe America's long fight in the Hindu Kush as a series of 1-year deployments, cobbled together as units rotate in and out of the war zone with no real continuity or focus on a clear endstate. Such analysis is far more accurate than some may care to admit. As cynical as the comment may be, it gets to the heart of the reactive nature of the U.S. mission there and the challenges faced by the military as civilian policymakers slowly morphed the mission from counterterrorism, to nation-building, to counterinsurgency in an escalating war tragically overshadowed and undercut by events in Iraq (190).

The Valley's Edge is the autobiographical story of one of those deployments as seen through the eyes of a Department of State Political Advisor serving in the Uruzgan Provincial Reconstruction Team

(PRT) in southern Afghanistan in 2005 and 2006. Green's stint reflects the overall American experience in the country. PRTs are units focused on civil development and intended to assist the Afghan government in establishing basic infrastructure and services, as well as the necessary skill sets to care for a population battered by nearly 40 years of incessant warfare. Composed of personnel from various U.S. Government agencies and the military, these teams are among the most important units on the ground. They function in direct support of American and North Atlantic Treaty Organization objectives and are critical for building and sustaining effective governance. As a key member of the team—with the attending corruption, infighting, pitiful resources, and lack cultural intelligence and understanding he and the PRT faced on the ground—Green's story reflects the challenges faced by the United States and its allies in Afghanistan.

The author, currently a fellow at the Institute for Near East Policy in Washington, DC, has extensive experience in the war on terror including tours in Afghanistan and Iraq in both military and civilian capacities. This no doubt informs his central premise and stated purpose for writing: to highlight senior leadership failures which have undermined the sacrifice and faithful efforts of Americans on the ground trying to carry out national policy in Afghanistan (Epilogue).

Green's journey to Uruzgan Province began in the Pentagon on September 11, 2001, where he was working in the Office of the Secretary of Defense when Flight 93 struck the building. Like many Americans in the early days of the war on terror, he was driven to participate as meaningfully as he could. His commitment led him to the State Department and the Uruzgan PRT in Tarin Khowt, where he learned the realities of counterinsurgency warfare in a short time. His experiences are a microcosm of U.S. efforts to create a Western-style democracy among people traditionally resistant to central authority.

Green's work is at once a personal memoir and a war story. As such, it often highlights PRT activities in which he was personally involved including civil-military operations, psychological operations, the 2005 Afghan national elections, and other development and governance initiatives throughout Uruzgan Province. Yet there



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Defense Horizons 76

Sharing to Succeed: Lessons from Open Information-sharing Projects in Afghanistan

By Linton Wells II, James Bosworth, John Crowley, and Rebecca Linder Blachly

Unless U.S. and coalition forces can share information with the populations they seek to influence in complex civil-military operations, they cannot achieve the goals for which they were committed. Information, communications, and related support structures influence all aspects of complex operations and need to be treated as critical infrastructures and essential services but rarely are.

Open information-sharing projects require sustained leadership interest plus shared and stable priorities among many parties. Absent this emphasis, the authors argue, changes in personnel, mission priorities, and funding levels will make it hard to develop, transition, and sustain any such effort. Observations from information-sharing projects in Afghanistan suggest several ways to change behaviors that can turn lessons observed thus far into lessons actually learned.



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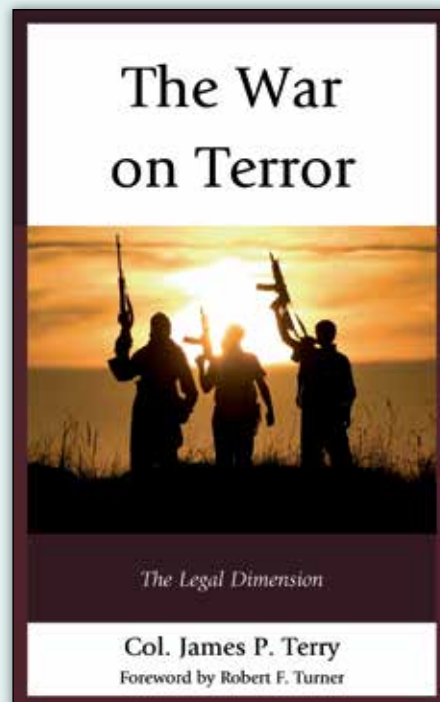
is no explanation of how these capabilities were synchronized and applied, or how his experiences are tied to the greater mission. Green visited much of the province and interacted closely with key political and security officials, and the book highlights his attempts to stabilize a region at serious risk to Taliban infiltration and influence (158–161). Green describes these events in close detail, giving readers a glimpse into the difficult and austere challenges associated with American nation-building efforts in Afghanistan. As a memoir, Green's tale is rich; he captures the exotic and desolate beauty of Afghanistan and relates the complexities of its people as only one who has been there can.

Yet lost in descriptions of the wilds of Uruzgan and the corrupt dealings of colorful Afghan police chiefs and tribal warlords are the lessons Green intends to convey. *The Valley's Edge* is a cautionary tale of 21st-century warfare gone wrong on the fringes of the American empire. Indeed, there is an air of criticism running through the book as leitmotif, calling into question the practices and methods of activities, headquarters, and individuals who may have displeased Green during his time in Afghanistan (9, 143). Sections are prefaced by quotations from famous counterinsurgency theoreticians, ostensibly to indicate lessons the United States and its senior leadership have failed to heed. But the devil escapes in Green's details, so to speak, as he fails to tie his work in Uruzgan and the lessons of the past to America's predicament of the present. A contextual gap exists between Green's experiences in 2005 and the growing insurgency he encountered upon his return to the province. His first-person accounts often sacrifice valuable corroborating details. Without this requisite scene-setting, readers uninitiated in the intricacies and pitfalls of counterinsurgency warfare may be left wondering how Green's experience relates directly to America's current circumstances in Afghanistan.

Despite this oversight, there is still purposeful value in Green's experience, and *The Valley's Edge* becomes more relevant given President Barack Obama's April 2012 declaration of American commitment and partnership with the Afghans. In many ways, the United States is just now beginning to fight the war in Afghanistan, and Green's account is valuable as a glimpse into

the realities on the ground that have brought the United States to this point in its foray into the Hindu Kush. In this light, the book might actually convey the lessons its author suggests. Green's contribution to the literature *and to the fight* lies in his honesty and for that he should be commended. **JFQ**

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The War on Terror: The Legal Dimension

By James P. Terry
Rowman & Littlefield, 2013
192 pp. \$60
ISBN: 978-1-4422-2242-7

Reviewed by
ALICE A. BOOHER

Long anticipated and well worth the wait, James Terry's cogent assessment of the legal vagaries and exigencies of the war on terror is both erudite and explicable. By delineating the confines of the traditional law of armed conflict (LOAC) as addressed with varying success by the four U.S. Presidents of the modern era who faced major incidents of terrorist violence (Jimmy Carter, Ronald Reagan, Bill Clinton, and George W. Bush), he serves up a foundation

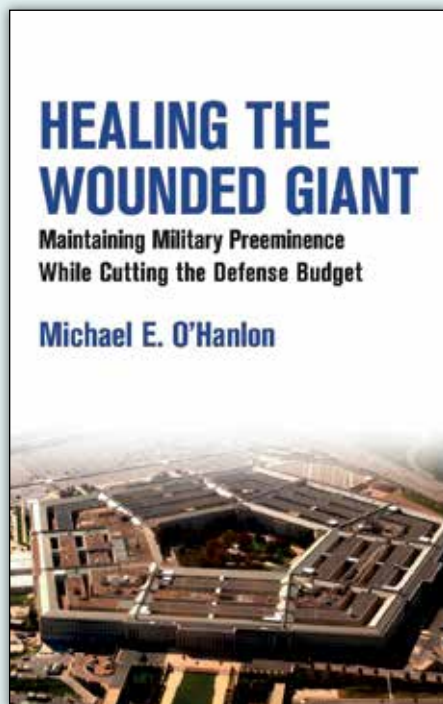
for both necessities and realities of international antiterrorism as addressed in policy and law. The book is neither tedious nor pedantic, but is written in such a detailed but concise manner as to enlighten a neophyte and expand the grasp of an expert. Each of the specifically targeted chapters commences with a summary of the goals and then proceeds to meet them, whether the topic is piracy or covert action, *habeas corpus* or interrogation and torture. A generous measure is given to the slippery alternative slopes of military versus Federal trials while also addressing unique factors such as environmental terrorism and the implications of media involvement.

Terry brings to the writing table his 27 years experience as a combat Marine, exceptional scholarship, legal practice within government including at the Departments State and Defense, and a lifetime of prodigious writing particularly on coercion control and national security law. As former Chairman of the Board of Veterans Appeals (2005–2011), he is currently Senior Fellow in the Center for National Law at the University of Virginia. He generously brings this expansive credential to the *War on Terror* and does so with considerable panache.

To paraphrase the book's foreword by esteemed security law scholar Robert F. Turner, issues relating to the legal dimensions of current armed conflict have few clearly agreed-upon answers even among experts, allowing for debates among able and honorable people on both sides. In that spirit, not everyone will agree with Terry's conclusions.

Nonetheless, the book provides a sound basis for understanding the fundamentals and intricacies of the problems, and a solid structure for gaining a modicum of understanding of the mandates and options for resolution. **JFQ**

Alice A. Booher, JD, is a former Foreign Service Officer and Counsel in the Department of Veterans Affairs, Board of Veterans Appeals (1969–2011).



Healing the Wounded Giant: Maintaining Military Preeminence While Cutting the Defense Budget

By Michael E. O'Hanlon

Brookings Institution Press, 2013

100 pp. \$19.95

ISBN: 978-0-8157-2485-8

Reviewed by

JOHN R. EDWARDS

Sequestration has spurred a number of reports and books such as this one by defense expert Michael O'Hanlon, who urges the United States to "avoid Afghanistan-like wars" and the force structures associated with large-scale, land-centric combat. Here, he focuses on ways to reduce the costs of defense in order to achieve established strategy rather than presenting any revolutionary changes to U.S. strategy itself. He presents the deficit as one of the greatest challenges to national security, arguing that there are ways to cut another \$200 billion in the next decade beyond the Obama administration's current baseline reduction of \$350 billion. Readers grappling with the difficulty of sustaining a "preeminent" military with reduced funding will be rewarded with challenges to the status quo and insightful ideas as the United States moves beyond the previous decade's military growth. Yet the planned military

posture is dependent on estimates of the future security environment, which is where the book begins.

Chapter one starts with thoughts on U.S. grand strategy, which serves as a framework for future force structure. While O'Hanlon acknowledges short-term security challenges in the Middle East, South Asia, and Northeast Asia, he argues that the United States must uphold the long view in strengthening its nonmilitary foundations to maintain enduring power. He also provides broad ideas that hold considerable merit, such as the need for allies to contribute more to not only their own security, but to regional and global security as well. Nonetheless, the reader must judge if his views of the security environment are satisfactory and the accompanying force structure recommendations are adequate.

Chapter two proposes a future ground force structure for the Army and Marine Corps that is much smaller than today since the assumption is that the United States will not engage in protracted land wars of the kind recently experienced in Iraq and Afghanistan. Of the \$200 billion in total savings that O'Hanlon argues is plausible, land forces account for the largest single savings component at \$80 billion. He states that the United States can maintain the same combat capability through reductions in Active-duty Army Brigade Combat Teams (BCTs) and Marine Infantry Regiments by shifting some BCTs to the National Guard. This would sufficiently support his "1 + 2" construct while providing for a base force that could expand if necessary. It is worth noting here that the "1 + 2" construct is somewhat a hybrid of previous studies from the last 25 years, such as the Bottom Up Review strategy of winning two major regional conflicts. However, O'Hanlon's idea is less ambitious, calling for the United States to be able to fight "one war plus two missions," the latter effort characterized by stabilization and peace-keeping like the drawdown efforts in Afghanistan.

Chapter three highlights operations in the Asia-Pacific where the Navy and Air Force are expected to be the leading Services, as evident by the emergence of Air Sea Battle. In this chapter, O'Hanlon builds on his push for increased burden-sharing by allies, especially in terms of airbase access, which would facilitate a reduction in aircraft carriers. He carefully argues that



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Strategic Forum 281

The Rebalance to Asia: U.S.-China Relations and Regional Security

By Phillip C. Saunders

The rebalance responds to the Asia-Pacific region's increased economic and strategic weight and seeks to bring U.S. global diplomatic, economic, and military resource commitments into balance with expanding U.S. regional interests. According to author Phillip C. Saunders, a key challenge is making the rebalance robust enough to reassure U.S. allies and partners while not alarming Chinese leaders to the point where they forgo cooperation with Washington. Chinese officials and scholars are skeptical about the U.S. rationale for the rebalance and criticize its supposed negative effect on regional security. However, China has also redoubled efforts to stabilize Sino-U.S. relations and build a "new type of great power relations."

To prevent unwanted strategic rivalry, U.S. and Chinese leaders should increase cooperation on common interests and seek to manage competitive aspects of U.S.-China relations.



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Strategic Forum 282

Transitional Justice for Syria

by Nicholas Rostow

Syrian political and community leaders are already planning for postconflict “transitional justice.” Transitional justice refers to the wish to hold perpetrators of atrocities accountable by means of some formal process that helps instill or rebuild the rule of law that replaces a former government perceived as unjust. No single model for transitional justice exists; in the course of confronting, overcoming, and recovering from serious domestic upheaval and conflict, a substantial number of countries have employed various means to achieve transitional justice.

Syria can help itself by quickly choosing a model for transitional justice that is consistent with its national culture and that meets the standards expected of such efforts with respect to due process and transparency. Such an effort may facilitate national healing and reconstruction and allow warring parties to find common ground. If delayed, transitional justice may be irreparably supplanted by the wholly destructive desire for private or communal vengeance.



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BOOK REVIEWS

the United States should continue relying on airbases in the Middle East, which provide greater airpower capability at significantly lower costs than carriers, saving \$10 billion a year. While he acknowledges that friendly countries have a vote in how U.S. forces operate from their soil, he assures readers that a smaller carrier force would compensate for such constraints. He takes aim at the F-35 program, too, stating that advances in precision weaponry enable a smaller number of F-35s to be purchased than currently programmed. In terms of the surface and subsurface fleet, he advocates “sea swapping,” where ships and attack submarines would utilize dual crews to maintain a longer forward presence. This concept is in use today with the Navy’s ballistic missile submarines.

Chapters four and five discuss modernization, nuclear weapons, missile defense, and intelligence. O’Hanlon prudently cautions against taking another “procurement holiday” that characterized military budgets in the 1990s, reminding readers that the Reagan buildup of the 1980s enabled American success since 2001. Further victory resides with fully funding acquisition but revising it with new notions such as counting Air Force and future Navy unmanned aerial vehicles as fighter jets. These actions could permit substantial decreases in the planned purchase of nearly 2,500 F-35s with a program cost of \$300 billion. He also urges further reductions in nuclear weapons below the current Strategic Arms Reduction Treaty agreement of 1,550 strategic nuclear warheads by retiring intercontinental ballistic missiles and refurbishing existing ballistic missile submarines. The rationale for these cuts is the belief that the United States will not fight a war with Russia and thus only needs to maintain a sufficient nuclear force to deter Moscow and Beijing.

The final chapter covers military compensation and Pentagon reforms. O’Hanlon advances several ideas such as reforming retirement to include IRA-like contributions for members serving less than 20 years, halting future increases in military pay, and increasing members’ sharing of health-care costs. Throughout this chapter, he makes the overused comparison of the military and civilian sector, forgetting that the military members’ sworn oath to make the ultimate sacrifice is a fundamental and often overlooked distinction between the groups.

Healing the Wounded Giant does a reasonable job of generating the discussion for further reductions and provides sensible ideas for maintaining preeminence with a smaller defense budget. While O’Hanlon contends that his force posture recommendation is flexible enough to respond to a changing future, military minds will likely struggle with that point. After all, the need to plan for the worst-case scenario creates dissonance in the ability to think realistically about the plausibility of the worst-case threat. While some readers may dispense with some of the recommendations, it would be irrational to discard them all. In the end, it is imperative that America preserves its military preeminence while at the same time being mindful of the new reality of shrinking defense budgets. This is where O’Hanlon gives readers a lot to contemplate. **JFQ**

Lieutenant Colonel John R. Edwards, USAF, is the National Defense Visiting Fellow at the Stimson Center in Washington, DC.

Mission Command

Addressing Challenges and Sharing Insights

By JAMES PARRINGTON and MIKE FINDLAY

One of the myths of mission command is that it equals less or little control. In some ways this could not be further from the truth.

Mission command is the balancing of command and control, and different ways to gain control.

I would offer that universal understanding of commander's intent is a very powerful method of control.

—Senior flag officer, 2013

Juxtaposing *mission command* and *cross-domain synergy* has clear utility at the strategic and operational levels for operating at the *speed of the problem*. Mission command is important in setting conditions for military subordinates. Cross-domain synergy leverages the capabilities of our many mission partners to increase overall effectiveness. This article addresses our observations on mission command. The next publication will include our observations on cross-domain synergy.

Three Major Insights

Build Trust and Gain Shared Understanding. Joint commanders increasingly note the large number of mission partners that they must work with to build trust, share understanding, and achieve unified action. They also note how national and international leaders' viewpoints and policies change as these decisionmakers interact and learn. Building and maintaining trust, continuing dialogue, and gaining shared understanding with the many mission partners impose significant time demands on commanders and staffs at combatant commands and joint task forces (JTFs). This may be a markedly different experience for those whose previous experience was at the tactical level. However, trust and

shared understanding enable empowerment, cross-domain synergy, and ultimately effectiveness.

Empower Subordinates to Act. Today's interconnected world is unpredictable and complex. The pace of change and speed of operations is accelerating. In response, commanders find they must share both *operational context* and their *intent* to successfully empower disciplined initiative in their subordinates.

Support Command Relationship and the Role of Establishing Authority. The need to leverage many capabilities from other commanders and partners to achieve cross-domain synergy highlights the importance of the support command relationship and requires increased effort by Establishing Authorities to prioritize, allocate resources, and synchronize actions to act at the speed of the problem. Direct involvement by the Office of the Secretary of Defense and Joint Staff is essential to enabling agile, cross-combatant command synergy.

Mission Command

Commanders at the joint level use some form of a mission command philosophy focused on the art of command in today's complex environment, regardless of the technological and informational improvements that many refer to as the science of control.

The *art of command* is the creative and skillful use of authority, instincts, intuition, and experience in decisionmaking and leadership while the *science of control* is about the systems and procedures that improve a commander's understanding and support the execution of missions. Effective joint commanders leverage both art and science.

The Chairman of the Joint Chiefs of Staff notes in his Mission Command White Paper that the burden is on the commander due to the complexity and uncertainty of the environment, tempo of operations, and number of mission partners. Additionally, while we leverage new technology to advance our science of control, that aspect may not always be robust (for instance, in austere environments) and may be vulnerable to attack. This further reinforces the need to focus on mission command.

Mission command is a command philosophy, as noted in the *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO). The key attributes of this command philosophy (trust, understanding, and intent) are in current joint and Service doctrines. All commanders exercise varying degrees of control in their application of mission command based on several factors, such as the situation, activity, and capabilities of forces.¹ One example of this is the positive and procedural control measures used within airspace control.²

A mission command philosophy allows for the Service and functional components and coalition partners to operate in a decen-

Colonel James Parrington, USMC, is Chief of the Deployable Training Division (DTD), Joint Staff J7, Joint Training. Colonel Mike Findlay, USA (Ret.), is Senior Training Specialist in DTD.

tralized manner in accordance with their respective doctrines and concepts. The Navy's daily intentions messages and Composite Warfare Commander Concept and the Air Force's centralized control and decentralized execution concept for command and control are Service examples. Mission command provides the means (through commander's intent, mission type orders, and decentralized execution) to operate at the speed of the problem by increasing overall agility and effectiveness, and enables better synergistic cross-domain operations with our joint, inter-agency, and multinational mission partners. We have seen the following challenges in the exercise of mission command.

Understanding the many perspectives, interests, and policies at national and international levels is hard for the commander and staff to digest. It is difficult to remain abreast of the continually changing geopolitical context and national guidance due to its scope, complexity, and many players. (For example, in 2011, the mission in Libya rapidly evolved from one initially focused on noncombatant evacuation to that of military intervention). It is equally hard to rapidly share this changing understanding at every echelon in the military formation to enable disciplined initiative. Subordinates may not always grasp the subtleties of the broader and changing context in which they operate. This can result in the commanders opting to retain control and not empower their subordinates, potentially losing the initiative.

The decentralized nature of mission command and delegation of approval levels require that subordinate commanders understand and appreciate the many relevant laws, policies, and directives. Lack of a shared understanding of these *authorities* and their limitations can result in loss of legitimacy, trust, cohesion, and tendency to retain centralized control.

Establishing and maintaining a common and uniform understanding of authorities become especially relevant in operationalizing a mission command philosophy. There are numerous U.S. authorities (Titles 10, 22, 50, and others) and significant international and national authorities (including the host nation) in multinational operations. There are also many specified authorities and responsibilities within the U.S. Armed Forces (such as the operational direction authority of a joint force commander and Services' Title 10 and administrative control responsibilities).

An example of this lies in the complex administrative control and Title 10 relationships that the U.S. National Support Element in Afghanistan has with the theater Service component commands (such as Army Central) and the Service forces under the North Atlantic Treaty Organization operational control of the commander of the International Security Assistance Force. Understanding and application of these many authorities require frequent special staff access to the commander as he frames problems, provides guidance, and makes decisions.

The global *information environment* brings several challenges. It leads to an increase in the tempo of operations as we are challenged to observe, plan, decide, and act quicker than the adversary. It can also lead to instances of information overload as commanders attempt to process all information before making decisions. In some cases, we see that this onslaught of information—driven by the staff—may preclude commanders from taking valuable time to reflect on the problem, develop an operational approach, and craft clear guidance and intent. In these cases, the commands often default to a centralized control philosophy as they react to emerging challenges with no clear overarching approach.

Staffs may also be inclined to rely too much on the science of control relative to the art of command by implementing more reporting, control measures, and battle rhythm events in an attempt to fully monitor, track, and control operations. Staffs may not understand or be comfortable in operating within a mission command construct of trust, shared understanding, intent, and empowerment. Likewise, the opposite may also exist where the staff may have to operate in an environment where shared understanding and trust are inadequate at the command level.

The information environment also has the potential to imbue tactical action with near immediate strategic ramifications due to visibility in the continuous 24-hour media. This *could* lead to risk adverseness and a tendency to overcontrol and centralize decisionmaking when we may need to do just the opposite.

Successful units fight through this by working even harder to share understanding; provide clear intent; and trust, decentralize, and empower subordinates to appropriately act at the speed of the problem. We also see commanders using their instincts and

intuitive judgments to cut through the fog and friction induced within the information environment.

The interconnected nature of operations requires continuous interaction with a *large number of our unified action mission partners* especially at the strategic and operational levels. Building and maintaining trust with these many partners are difficult and impose significant time demands on commanders and staffs. This has particular significance to flag and general officers as they assume positions of authority in strategic and operational level positions and spend significant time engaging with these partners. They will not have as much time available to control or guide subordinates as they may have done in previous assignments. Thus, the concept of mission command and the importance of shared understanding, guidance, and intent may be even more important at this higher level as commanders increase efforts up and out with other mission partners. Nurturing relationships must be a constant drumbeat for the commander—in and out of crises.

Our mission partners—both adjacent partners and subordinates—may come from *diverse cultures or backgrounds* in which decisionmaking is centralized, and where empowerment, subordinate-level decision-making, and acceptance of responsibility are not wanted or expected. Some mission partners may not have the capability to gain the same degree of situational understanding or have the same experience in operations (for example, a new U.S. or coalition member to the team) and may require increased support, supervision, or control. Equally important is understanding how each partner communicates. Some partners may use texting on cell phones, some need formal papers, some use fax, some prefer phone, and some require a formal top-down approach. Each partner has a method of communicating that is unique, and commanders must devote the time necessary to figure this out or they will waste time with ineffective communication that slows down the building of trust and confidence across the team. Commanders must recognize these differences as they build relationships, and massage and tailor the necessary level of coordination, control, or supervision. Ignoring these differences can damage trust and teamwork, and risk mission accomplishment.

The decade of learned lessons in irregular warfare informs us of the value of decentralization to achieve operational objec-

tives and is the basis for globally integrated operations described in the CCJO. History suggests there is potential for *a return to more centralized command philosophies* as the military transitions from large-scale conflicts to a different landscape characterized by peacetime engagements and limited conflicts. Garrison operations, tight fiscal constraints, and increased competition for promotion could bias leaders, especially within the Services, toward centralization in an effort to be more efficient and controlling. Our joint headquarters may also be tempted to centrally control the myriad of more scrutinized peacetime engagements. However, while centralization may work to some degree in peace, it may not work in conflict (or a disaster response) in which higher commanders rely on subordinates' initiatives and speed of decision and action. It takes time to develop a culture of decentralization and empowerment; it cannot occur overnight when a crisis occurs. Therefore, we suggest the need to deliberately determine the degree of a centralized or decentralized command climate and culture in peacetime.

History also suggests the potential to *return to a Service-centric focus* in the years ahead as we move away from the decade of war and close interaction. Over time, we may forget the potential benefits of a unified action approach as we focus on Service basic skill sets. We may also lose the valuable tactics, techniques, and procedures relevant to joint and combined operations with our mission partners. This could move us away from a mission command philosophy and interdependent mindset with our partners that are essential for success in periods of conflict and other operations.

Insights

Building and maintaining trust is possibly a commander's most important action to establish and exercise mission command and to achieve cross-domain synergy. Developing trust gains synergy with mission partners and enables mission type orders and empowerment.

Personal relationships are often equally or more important than command relationships in today's environment. These relationships must be built and continuously maintained through both dialogue and actions—before, during, and after crises. This has significant time implications, especially the time to build and maintain trust and rela-

tionships with stakeholders and new mission partners (for example, the time required for an incoming joint commander to build trust through words and actions with the country team(s) or a coalition partner that just joined the team). We see commanders making this their priority. There are a number of observed best practices:

- Plan how to build and maintain trust in and out of crisis.
- Identify the organization(s) that the commander and staff will be most dependent on or work with as the target for early engagement and team-building. Commanders' time is finite so they have to pick where to invest with regard to critical relationships.
- Establish a personal relationship between commanders that will become a critical enabler when staffs are required to execute operations in the fog of war.
- Build trust through words and actions, with continuous reinforcement.
- Allocate the necessary time to build trust before a crisis (in Phase 0—Shape).
- Include mission partners in commander conferences, circulation, and battle rhythm events.
- Establish private means and the atmosphere to engage directly with subordinate commanders.
- Leverage both the ability for frank discussions in private meetings and public engagements with mission partners to share perspectives.
- Focus on aligning actions and words (that is, follow through on promises).
- Broaden engagement to more than just commanders (for example, staffs and subordinates).
- Consider the advantages of using standing Service and functional component headquarters to employ forces versus default to standing up ad hoc JTF headquarters due to the trust and relationships already built within the permanent standing headquarters with both the combatant command headquarters and area of responsibility mission partners.
- Maintain sensitivity to guard against/correct the potential for a false perception of U.S. military leaders' disregard of other coalition members/roles through overemphasized use of U.S. SIPRNET and U.S.-only meetings.

Gaining and maintaining common understanding of the situation, problem, and intent are significant challenges. This

can affect what "right looks like." National leadership may have different geopolitical perspectives than field commanders. A theater-strategic commander might have a different perspective on the environment and problem than an individual at the tactical level. Similarly, a military commander may have a different perspective than a State Department Foreign Service officer. Thus, the right thing for one may not be the same right thing for another. This also has a temporal aspect to it: the environment is continually changing and the understanding of what is right may not keep up (for example, the changes in nighttime tactical operations and evidence-based operations in Afghanistan as the government matured and asserted its sovereign authority).

We observe that one must continually dialogue with higher authorities and mission partners to better understand the changing environment and perspectives and what a shared understanding of right looks like. This continuing dialogue deepens trust, clarifies authorities for action, assists problem-framing as part of design, enriches guidance and intent, enables synergy with mission partners, and, coupled with mission-type orders, enables us to release the disciplined initiative of subordinates to do the right thing. One combatant commander notes, "collaboration releases the initiative of subordinates." This collaboration and information-sharing has significant time implications for joint force commanders and subordinates. There are a number of observed best practices:

- Recognize the geopolitical challenges that national-level leaders will likely face in a crisis. Commanders can assist these leaders by understanding their perspectives while also keeping them informed of theater-strategic and operational-related perspectives, potential risks, and feasible options. This will enhance trust between national leadership and commanders required for the resultant delegation of authorities and standing permissions.
- Recognize the contract made with subordinates as a result of sharing understanding. Shared understanding is a trust contract for subsequent disciplined initiatives on the part of the subordinates. The word *disciplined* is key here, signifying recognition (and agreement) from both parties that actions taken will be consistent with higher intent and a shared context.

- Emphasize use of commander conferences (both physical and virtual).

- Direct staff-level interaction and sharing (that is, not only commanders sharing information). Assess this interaction and emphasize as required.

- Focus attention on understanding authorities, which takes effort and is often led by the J5 (Plans) and Staff Judge Advocate.

- Conduct significant commander circulation (and staff circulation) sharing perspectives (up, down, and across). Discipline scheduling to prevent circulation fratricide due to multiple visits overwhelming the same subordinate—possibly with different messages.

- Provide feedback to the staff from commander circulation; the staff does not have the benefit of the understanding gained through this circulation and discourse.

- Develop appropriate Commander's Critical Information Requirements (CCIR), organize the staff, and discipline the battle rhythm to ensure the staff optimally supports agile commander decisionmaking. Use instincts and intuitive judgment when appropriate to cut through the fog and friction of information overload.

- Develop a communications infrastructure that allows for information-sharing and collaboration with mission partners (for example, the Defense Department, U.S. inter-agency community, and coalitions). This will likely require some form of common mission network much like the Afghanistan Mission Network, All Partners Access Network, or the emergent Mission Partner Environment discussed later in this article.

Providing quality guidance and intent that links strategic direction to operational approaches to tactical action—the essence of operational art—is a key responsibility of the commander. This process starts with insightful dialogue to inform and be informed by national and international leadership. Quality guidance and intent, coupled with risk guidance, enables mission command. There are a number of observed best practices:

- Make the time to *dialogue* and *strategically reflect* on the problem before crafting and providing guidance and intent.

- Bring external players into the inner circle to discuss the environment and challenges. Attempt to see the various perspectives on the problem: the political-military aspects from the national (and international

level), regional level, and adversaries' perspective (value of red teaming).

- Consider how an operational approach and intent can place the adversary on "horns of a dilemma" by exploiting vulnerabilities and maintaining advantage.

- Recognize the value of continuous circulation and sharing of intent, particularly in the early stages of a crisis.

- Consider how intent can enable the command and subordinates to take on an adaptive stance to be able to rapidly adapt to a thinking adversary.

- Co-develop intent with mission partners (including higher and subordinates) to gain perspectives and subsequent understanding and buy-in. Sample interpretation before issuing is often helpful. What the commander writes and what subordinates read may be different—better to fix this before sending.

- Personally craft commander's intent. We recognize this is a common dictum, but we still see planners drafting intent. These draft intents often predispose commander's final intent and guidance documents and do not reap the benefit of the commander's personal reflections on the problem and approach.

- Continuously share intent not only in orders but also during circulation, and in meetings and other battle rhythm events.

- Be prepared to change intent based on the situation and reframing of the problem.

- Do not abrogate the higher headquarters design and planning responsibilities as part of the concept of decentralization.

Providing risk guidance is an important aspect of mission command. It helps to share intent and understanding by communicating the commander's perspective of his perceived impediments (or hazards) to the mission and force, together with respective decision approval authorities (often through some form of decision-approval matrix). This is directly related to empowerment. There are a number of observed best practices:

- Deliberately analyze risks to the mission and force. Use red teams.

- Understand national caveats of mission partners before publicly outlining risk. Publicly outlining risk before understanding national caveats creates the possibility of placing team members in embarrassing positions (since they may not have the

authority to decide what they can or cannot do in an operation).

- Delineate these risks to the mission and the force together with risk-mitigation direction (including decision approval authorities).

- Be clear where the commander is willing to accept risk. Do not be vague and require subordinates to "suck it up."

- Make it clear *who* is allowed to take what level of risk.

- Correlate key risks with CCIR, which helps share to the staff and subordinates what the commander believes is important, such as future decisions and potential risks.

The last 10 years of combat reinforce the idea of *decentralizing and empowering subordinates and staff* to act at the speed of the problem. Those who did not appropriately decentralize lost agility and initiative, and risked mission failure. We have seen how commander's intent—focused on the *what* and *why* versus the *how*—enables the disciplined initiative in subordinates to gain agility and effectiveness.

Commanders need to take the time to understand, recognize, and develop a subordinate's ability for empowerment and initiative, together with the skill to know how and when to adjust the necessary level of supervision. Consider how some commanders in Iraq and Afghanistan focused their attention and coaching on a new member of the team, developing his or her tactical prowess until up to standard, and then incrementally empowered them.

Combatant commands also recognize the need for empowerment. Every geographic combatant command we visit has numerous ongoing missions, including multiple peacetime engagements as they work with many U.S. Ambassadors, nations, and stakeholders throughout their area of responsibility. Similarly, functional combatant commands are working with all of the geographic commands. Each relies on mission command to set conditions for numerous subordinate actions. These higher headquarters focus on design and planning activities and share their understanding and provide guidance and intent to help set conditions for their subordinates to execute. There are a number of observed best practices:

- Recognize the need not only for *intent*, but also for a *shared understanding*

of *context* in order to empower disciplined initiative—particularly important at the strategic and operational levels. This is related to the earlier discussion on disciplined initiative.

- Delegate authorities to the lowest appropriate level capable of integrating assets to work inside the adversary's decision cycle. Within this context, balance decentralization with the need for the requisite level of supervision. Accept becoming uncomfortably decentralized to achieve mission success. This may include providing assets to subordinates as well.

- Develop terms of reference documents that lay out roles and responsibilities of deputy commanders and key staff within the headquarters.

- Tailor decision approval matrices applicable to decision approval authorities both within the headquarters and for subordinate headquarters. For example, J-code directors may be empowered with certain decision authorities to maintain agility and effectiveness within the headquarters in addition to empowering subordinate commanders.

- Align CCIR and other reporting requirements with decision-approval levels. While recognizing the requirement for shared understanding, guard against establishing CCIR and other reporting requirements that may impinge on the initiative or slow agility of subordinate units.

- Conduct quality in-briefs with new leaders/key personnel coupled with focused visits and circulation to assess strengths, degree of experience, and comfort in exercising initiative and accepting responsibility. Make subsequent decisions on necessary coaching, mentoring, and tailoring of degree of empowerment. (Some members of the team may be empowered more than others based on varying levels in their abilities, propensity for initiative, and mission set.)

- Be attentive not to overwhelm subordinates with collaboration or visits as they are also planning and conducting their missions with their subordinates. We often see deliberate limiting of demands on subordinates for extensive updates during higher headquarters battle rhythm updates, rather than tasking the higher headquarters staff to report on the situation, and then giving subordinates freedom to surface issues and questions.

- Define the fight. Ask the key questions: What is the combatant command's fight, the JTF's fight, and the subordinate's

fight? If we do not do this upfront, everyone focuses on fighting the subordinate's fight; no one is focused on setting the conditions upfront for their success.

- Discipline the organization to stay at the right level from a higher headquarters perspective. We have heard the common adage before: "One is more comfortable and will default to doing his last job, and not his new job." Operational and strategic level headquarters will be tempted to operate at the tactical level. One commander deliberately kept his headquarters *lean* so as not to give the staff the capacity or opportunity to take on subordinate headquarters tasks. We continually hear the wisdom in focusing higher headquarters on setting conditions for the success of their subordinates. This is all part of staying at the right level to enable mission command.

The Deployable Training Team point of contact for this article and many other operational-level insight and best practice papers is Mike Findlay. Please contact him at js.dsc.j7.mbx.joint-training@mail.mil. Additionally, many of the DTD papers are open source and available on the Internet. **JFQ**

NOTES

¹ As the *Capstone Concept for Joint Operations: Joint Force 2020* (Washington, DC: The Joint Staff, 2012), notes, "while mission command is the preferred command philosophy, it is not appropriate to all situations. Certain specific activities require more detailed control, such as the employment of nuclear weapons or other national capabilities, air traffic control, or activities that are fundamentally about the efficient synchronization of resources."

² See Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine* (Washington, DC: Headquarters Department of the Air Force, September 1997), and Joint Publication 3-52, *Joint Airspace Control* (Washington, DC: The Joint Staff, May 20, 2010), for good discussions on the centralized control and decentralized execution of airpower and airspace control. AFDD 1 addresses how decentralized execution allows subordinate commanders to take the initiative and increase airspace control effectiveness through real-time integration during execution. JP 3-52 addresses the concept of positive and procedural control measures that are used in airspace control. Airspace control procedures provide flexibility through an effective combination of positive and procedural control measures.

Joint Publications (JPs) Under Revision (to be signed within 6 months)

JP 1-05, *Religious Affairs in Joint Operations*

JP 2-0, *Joint Intelligence*

JP 3-06, *Joint Urban Operations*

JP 3-07.4, *Joint Counterdrug Operations*

JP 3-11, *Operations in Chemical, Biological, Radiological, and Nuclear Environments*

JP 3-17, *Air Mobility Operations*

JP 3-24, *Counterinsurgency Operations*

JP 3-27, *Homeland Defense*

JP 3-28, *Defense Support Civil Authorities*

JP 3-29, *Foreign Humanitarian Assistance*

JP 3-32, *Command and Control for Joint Maritime Operations*

JP 3-57, *Civil-Military Operations*

JP 4-0, *Joint Logistics*

JP 4-09, *Distribution Operations*

JPs Revised (signed within last 6 months)

JP 1, *Doctrine of the Armed Forces of the United States* (March 25, 2013)

JP 3-14 *Space Operations* (May 29, 2013)

JP 3-16, *Multinational Operations* (July 16, 2013)

JP 3-35, *Deployment and Redeployment Operations* (January 31, 2013)

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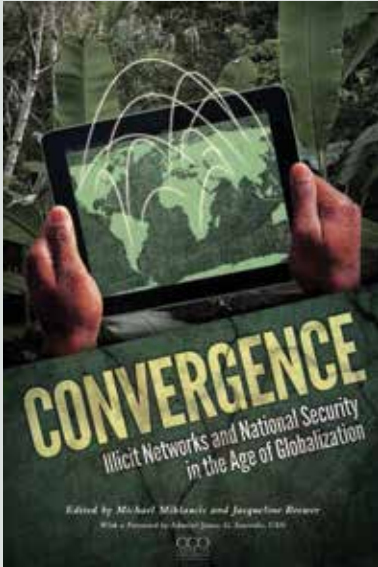
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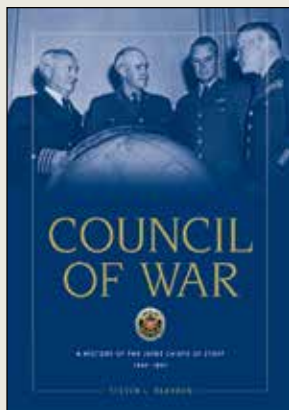
China Strategic Perspectives, No. 6

*China's Forbearance Has Limits: Chinese Threat and Retaliation Signaling
and Its Implications for a Sino-American Military Confrontation*

By Paul H.B. Godwin and Alice L. Miller

Since its founding in 1949, the People's Republic of China (PRC) has employed military force in defense of its security and territorial integrity. In many such instances, Beijing implemented a calculus of threat and retaliation signals. Beijing implements this deterrence calculus by a carefully calibrated hierarchy of official protests, authoritative press comments, and leadership statements. If the crisis persists and Beijing perceives its interests are not satisfactorily taken into account, its statements escalate in level and may include at first implicit and thereafter increasingly explicit warnings that it may use military force to achieve its goals. This approach has been employed consistently despite the sweeping changes in the PRC's place in the international order, the proliferation of foreign policy instruments at its disposal, the more complex crisis decisionmaking process and domestic political environment, and the dramatic evolution in Chinese media over the decades.

This study explores the question of whether improving military capabilities will lead Beijing to substitute sudden or surprise attack for the politically calibrated deterrence signaling it has employed prior to its past use of force. It also assesses the problem in four ways. It first reviews China's use of force since 1949 to determine the motivations driving Beijing's employment of military coercion. Second, it assesses China's crisis decisionmaking process and crisis management. Third, it assesses the prospects for China's more aggressive use of military coercion in Asia's emerging security environment. Finally, Beijing's signaling of China's intent to employ military coercion is assessed in detail using a series of crisis case studies covering the years 1961–2004.



Council of War: A History of the Joint Chiefs of Staff, 1942-1991

Steven L. Rearden's *Council of War: A History of the Joint Chiefs of Staff, 1942-1991* surveys the role and contributions of the Joint Chiefs of Staff (JCS) from the early days of World War II through the end of the Cold War. The JCS, an organization of military advisors and planners established early in World War II, first advised the President on the strategic direction of U.S. Armed Forces in that war and continued afterward to play a significant role in the development of national policy. Because of their relations with the President, the Secretary of Defense, and the National Security Council, a history of their activities, both in war and in peacetime, provides insights into the military history of the United States. The importance of their activities led the JCS to direct that an official history of their actions be kept for future generations to study. Dr. Rearden's *Council of War* follows in the tradition of volumes previously published about JCS involvement in national policy, the Korean War, and the Vietnam War. Using a combination of primary and secondary sources, and adopting a broader view of previous volumes, this fresh work of scholarship examines the military implications of problems from 1942 to 1991. Although focused strongly on the JCS, Rearden's well-researched treatise deals too with the wider effect of crucial decisions and their ensuing policies.

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